



**Eastern Sierra Council of Governments (ESCOG)  
Joint Powers Authority Agenda**

**Friday, April 8, 2022, 8:30 a.m.**

**Teleconference Only - No Physical Location**

**Members of the Board**

Town of Mammoth Lakes Councilmember John Wentworth - Chair,  
Inyo County Supervisor Dan Totheroh - Vice Chair, City of Bishop Councilmember Karen Schwartz,  
Mono County Supervisor Stacy Corless, Mono County Supervisor Bob Gardner,  
Inyo County Supervisor Jeff Griffiths, City of Bishop Councilmember Jim Ellis,  
Town of Mammoth Lakes Councilmember Lynda Salcido

NOTE: In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Assistant Clerk at (760) 965-3615. Notification 48 hours prior to the meeting will enable the Town to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 13.102-35.104 ADA Title II)

NOTE: Materials related to an item on this agenda submitted after distribution of the agenda packet are available for public inspection in the Town Offices located at 437 Old Mammoth Road, Suite 230 during normal business hours. Such documents are also available on the ESCOG website at [www.escog.ca.gov](http://www.escog.ca.gov) subject to staff's ability to post the documents before the meeting.

NOTE: This will be a Zoom meeting and will be conducted pursuant to the provisions of Assembly Bill 361 (AB 361) which amends certain requirements of the Ralph M. Brown Act. Public comments may be submitted to the Clerk via email at [boardclerk@inyocounty.us](mailto:boardclerk@inyocounty.us) before or during the meeting and may also be made via Zoom.

**Zoom Information:**

<https://us06web.zoom.us/j/85085604982?pwd=N0tTcWI4aVNScUJmZzMrNWdjeXp3dz09>

**Phone one-tap:**

US: +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799

**Join by Telephone:**

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Webinar ID: 850 8560 4982

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**1. CALL TO ORDER AND ROLL CALL**

**2. PLEDGE OF ALLEGIANCE**

**3. PUBLIC COMMENTS**

Notice to the Public: This time is set aside to receive public comment on matters not calendared on the agenda. When recognized by the Chair, please state your name and address for the record and please limit your comments to three minutes. Under California law the Eastern Sierra Council of Governments Board is prohibited from generally discussing or taking action on items not included in the agenda; however, the Eastern Sierra Council of Governments Board may briefly respond to comments or questions from members of the public. Therefore, the Eastern Sierra Council of Governments Board will listen to all public comment but will not generally discuss the matter or take action on it.

**4. CONSENT AGENDA**

**4.1. Approve the minutes of the Regular Meeting of February 4, 2022**

**4.2. Approve the minutes of the Regular Meeting of March 4, 2022**

**4.3. Consideration of A Resolution of the Board of Directors of the Eastern Sierra Council of Governments Regarding the Need for Continued Virtual Meetings to Protect Public Health**

**5. POLICY MATTERS**

**5.1. Receive a Presentation on the Inyo County Rural County Representatives of California Comprehensive Economic Development Strategy Grant, Bishop Business Resource Center and Other Regional Economic Development Activities**

**5.2. Discussion and Direction Regarding on Conversations with Regional Management Regarding Future ESCOG Programs of Work**

**5.3. Discussion and Direction Regarding Inyo National Forest Scope of Work for Inter-agency Coordination**

**5.4. Discussion and Direction Regarding Awarding Eastern Sierra Pace and Scale Accelerator Environmental Planning Services Contract**

**5.5. Consideration of Contract Amendment#3 for Administrative Services with Elaine Kabala (Eastern Sierra Planning, LLC)**

**5.6. Discussion and Direction Regarding Future In-Person and Virtual ESCOG Board Meetings**

**5.7. Executive Director Update**

**6. BOARD MEMBER/AGENCY REPORTS**

Informational reports from Member Agency representatives on committees, commissions, and organizations; general reports on Board Member activities

**7. REQUEST FOR FUTURE AGENDA ITEMS**

**8. ADJOURNMENT**

The ESCOG will adjourn to the next regular meeting scheduled to be held on June 10, 2022.



## Eastern Sierra Council of Governments (ESCOG) - Joint Powers Authority (JPA)

### Minutes of Regular Meeting

February 4, 2022, 1:00 p.m.

437 Old Mammoth Road, Suite Z, Mammoth Lakes

Members Present: Chair Karen Schwartz, Vice Chair John Wentworth, Board Member Stacy Corless, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Dan Totheroh, Board Member Jim Ellis, Board Member Lynda Salcido

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#### 1. **CALL TO ORDER AND ROLL CALL**

Chair Karen Schwartz called the meeting to order at 1:00 p.m. in the Council Chamber, 437 Old Mammoth Road, Mammoth Lakes. The members of the Board attended the meeting via videoconference.

#### 2. **PLEDGE OF ALLEGIANCE**

Board Member Jim Ellis led the Pledge of Allegiance.

Board Member Jeff Griffiths joined the meeting at 1:02 p.m.

#### 3. **PUBLIC COMMENTS**

There were no comments given at this time.

#### 4. **CONSENT AGENDA**

Moved by Board Member Stacy Corless

Seconded by Vice Chair John Wentworth

Approve the Consent Agenda

For (8): Chair Karen Schwartz, Vice Chair John Wentworth, Board Member Stacy Corless, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Dan Totheroh, Board Member Jim Ellis, and Board Member Lynda Salcido

Carried (8 to 0)

**4.1 Approve the minutes of the Regular Meeting of December 10, 2021**

**4.2 Approve the minutes of the Regular Meeting of January 7, 2022**

**4.3 Consideration of a Resolution of the Board of Directors of the Eastern Sierra Council of Governments Regarding the Need for Continued Virtual Meetings to Protect Public Health**

**4.4 Ratify Letter Regarding Providing Comments on the Community Economic Resiliency Fund Sent January 28, 2022**

**5. POLICY MATTERS**

**5.1 Receive a Presentation from Tim Golden, Bishop Climbers Coalition**

Executive Director Elaine Kabala introduced Bishop Climbers Coalition Director of Special Projects Bishop Climbing Ranger Tim Golden. Mr. Golden outlined the information in the Climbing Ranger Program Overview and Updates PowerPoint presentation.

There was discussion between Mr. Golden, Ms. Kabala, and members of the Board.

**5.2 Call for Selection of Chair and Vice Chair**

Town of Mammoth Lakes (TOML) Assistant Clerk Angela Plaisted announced that per the bylaws, it was time for the ESCOG to select a new Chair and Vice Chair. Ms. Plaisted asked the members of the Board for nominations for the position of Chair.

Board Member Lynda Salcido nominated Vice Chair John Wentworth for the position of Chair.

Newly appointed Chair John Wentworth announced that Inyo County was next in the rotation for appointment to the position of Vice Chair and asked Board Member Dan Totheroh if he was interested in the appointment since Board Member Jeff Griffiths had held the position most recently.

Chair John Wentworth nominated Board Member Dan Totheroh as the Vice Chair of the ESCOG.

There was discussion between Ms. Plaisted and members of the Board.

Moved by Board Member Lynda Salcido

Seconded by Board Member Karen Schwartz

Appoint Vice Chair John Wentworth as the Chair of the Eastern Sierra Council of Governments Joint Powers Authority.

For (8): Chair Karen Schwartz, Vice Chair John Wentworth, Board Member Stacy Corless, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Dan Totheroh, Board Member Jim Ellis, and Board Member Lynda Salcido

Carried (8 to 0)

Moved by Vice Chair John Wentworth  
Seconded by Chair Karen Schwartz

Appoint Board Member Dan Totheroh as the Vice Chair of the Eastern Sierra Council of Governments Joint Powers Authority.

For (8): Chair Karen Schwartz, Vice Chair John Wentworth, Board Member Stacy Corless, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Dan Totheroh, Board Member Jim Ellis, and Board Member Lynda Salcido

Carried (8 to 0)

### **5.3 Discussion and Adoption of Increase in Budget Appropriations for Fiscal Year 2021-2022**

Executive Director Elaine Kabala outlined the information in the staff report.

There was discussion between Ms. Kabala and members of the Board.

Moved by Board Member Stacy Corless  
Seconded by Board Member Bob Gardner

Approve an increase in appropriations by \$650,000 for funds secured by grant revenues and approve an increase in appropriations for principal repayment of the Rural Counties Representatives of California (RCRC) line of credit and an equal increase in revenue for the issuance of the RCRC line of credit.

For (8): Chair Karen Schwartz, Vice Chair John Wentworth, Board Member Stacy Corless, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Dan Totheroh, Board Member Jim Ellis, and Board Member Lynda Salcido

Carried (8 to 0)

**5.4 Discussion and Direction Regarding Visitor Connection Package Funding**

Executive Director Elaine Kabala outlined the information in the staff report and the Eastern Sierra Visitor Connection Program PowerPoint presentation.

Vice Chair Dan Totheroh left the meeting at 2:07 p.m.

**SPEAKING FROM THE FLOOR:**

TOML Town Manager Dan Holler said that the area managers had not discussed this item, but had discussed additional funding for the ESCOG. Mr. Holler reported that there was a regional manager's meeting scheduled to be held on February 18th to discuss various regional items, and asked for additional details regarding the structure, time frame and amount of the funding request to the member agencies. He reported that recent TOML and Mammoth Lakes Tourism (MLT) discussions had a large focus on education and sustainability not just visitor attraction marketing. Mr. Holler said that Alpine County had been invited to the area manager's discussion group.

Inyo County County Administrative Officer Leslie Chapman said that the role of the administrators, and County and City Management, related to the ESCOG was to review presentations, budgets and allocations and to make recommendations or raise questions. Ms. Chapman said that management could not strongly support an item because they work for their own Boards and the Boards would have to review the facts and vote on whether to participate or not.

Plumas Corporation Southern Sierra Project Manager Janet Hatfield reported that in the "wildfire" world they were struggling with authoritative sources for data and information, as well as common messaging and said that she felt that this program would help with that. Ms. Hatfield said that the ability to have an authoritative stamp on the messaging was important.

There was discussion between Ms. Kabala, Mr. Holler, Ms. Chapman, and members of the Board.

Moved by Chair John Wentworth

Seconded by Board Member Stacy Corless

Approve the ESCOG's support of the Eastern Sierra Visitor Connection Program and recommend that Executive Director Elaine Kabala meet with the member agencies for further refinement and then report back to the ESCOG with recommended next steps.

For (7): Chair Karen Schwartz, Vice Chair John Wentworth, Board Member Stacy Corless, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Jim Ellis, and Board Member Lynda Salcido

Absent (1): Board Member Dan Totheroh

Carried (7 to 0)

**5.5 Discussion and Direction Regarding ESCOG Strategic Meeting with County and City Administrators**

Board Member Karen Schwartz left the meeting at 2:19 p.m.

Executive Director Elaine Kabala outlined the information in the staff report.

There was discussion between Ms. Kabala and members of the Board.

CONSENSUS: The Board gave staff direction to convene meetings with the administrators of the four member agencies and to include ESCOG staff in the regular meetings of the County and City Administrators.

**5.6 Consideration of a Request for Proposals for the Eastern Sierra Pace and Scale Accelerator Project for Environmental Planning Services**

Executive Director Elaine Kabala outlined the information in the staff report.

Chair John Wentworth announced that Plumas Corporation Southern Sierra Project Manager Janet Hatfield was part of the team for this project.

There was discussion between Ms. Kabala and members of the Board.

CONSENSUS: There was consensus from the Board for staff to notice the Request for Proposals to Provide National Environmental Policy Act Services for the Eastern Sierra Pace and Scale Accelerator.

**5.7 Discussion and Direction to Staff to Apply for Capacity Funding through the USDA Strategic Economic and Community Development Program**

Executive Director Elaine Kabala outlined the information in the staff report. Ms. Kabala reported that she had received a call last night stating that the United States Department of Agriculture (USDA) Sustainable Economic and Community Development (SEDC) program was not appropriate for this funding request. She said that she spoke with another USDA contact who stated that there may be an opportunity appropriate for the project under the program and would get back to her at a later date. She said that she planned to research to see if the Rural Business Development Program was appropriate for this project and asked the Board for consensus of their support for her to submit an application under that program.

There was discussion between Ms. Kabala and members of the Board.

CONSENSUS: There was consensus from the Board for staff to continue to work with the USDA and Quantified Ventures to continue to investigate other funding opportunities for campground improvements throughout the Eastern Sierra.

**5.8 Discussion and Direction Regarding the Citizens Wildfire Task Force**

Executive Director Elaine Kabala outlined the information in the staff report.

Board Member Bob Gardner provided additional details regarding the Citizens Wildfire Academy (CWA).

There was discussion between Ms. Kabala and members of the Board.

CONSENSUS: Staff was given direction to support coordination and outreach for the (CWA).

**5.9 Receive an Update on Sustainable Recreation and Ecosystem Management Program Activities**

Executive Director Elaine Kabala provided an update on Sustainable Recreation and Ecosystem Management Program (SREMP) Activities. Ms. Kabala reported that the ESCOG had received a conditional award from the Buttermilk Infrastructure and Recreation Planning Initiative (BIRPI) and said that she was working on related administrative items which she planned to bring forward at the next meeting of the ESCOG.



Ms. Kabala said that she anticipated the Sierra Nevada Conservancy (SNC) Town to Trails Plan Award to be announced in March, and that the Whitebark Institute was now under contract for the Eastern Sierra Pace and Scale Accelerator.

There was discussion between Ms. Kabala and members of the Board.

**6. BOARD MEMBER/AGENCY REPORTS**

Board Member Lynda Salcido left the meeting at 2:43 p.m.

Board Member Jeff Griffiths provided an air service update. Mr. Griffiths said that winter service would end on March 26th with a possible start of summer service the first week of June with service to San Francisco or possibly Denver. He reported that the enplanement numbers had been between four hundred and fifty and one thousand sixty-seven departures per week and said that there had been between four hundred and eight hundred arrivals, with only ten cancellations at this point, none of which were due to weather. He reported that Inyo County's redistricting was complete and said that they were now a mountain based district going north, and that the new Congressional Maps were available. He said that he had attended some California State Association of Counties (CSAC) events and reported that Governor Newsom's budget looked like it would have a \$45M surplus and said that the Governor's office was focused on paying down debts, reducing pension obligations and initiating new programs.

Board Member Bob Gardner reported that Mono County's redistricting process had been successful. Mr. Gardner said that he would attend the National Association of Counties (NACo) Legislative Conference starting on the 12th and said that he would coordinate a working group on Resorts, Tourism and Gateway Counties and noted that Chair Wentworth would give a presentation on housing, along with presenters from other resort towns and said that the City Manager from Avon Colorado, who chairs the Housing Task Force for the Colorado Association of Ski Towns (CAST), would provide an overview. He said the session would be recorded for those interested that would not be able attend the event. Mr. Gardner said that he was impressed with CAST, which allowed members from ski towns outside of Colorado, and planned to ask Mono County Board of Supervisors to join that group.

Board Member Stacy Corless reported that Mono County was focused on the jail construction project in Bridgeport which would be funded by a \$25M award they had received from the State several years ago.

Ms. Corless said that an agreement with the construction management firm had been approved and additional financing would be discussed at the next Board of Supervisors meeting. She reported that the new facility would be located on County property where the old hospital was located. She reported that through Rural County Representatives of California (RCRC) she had spent a lot of time on California Wildfire and Forest Resilience Taskforce activities and RCRC Wildfire related activities and said that Governor Newsom's Budget proposal included a lot of funding for wildfire support. She said she recently attended a taskforce meeting and said those meetings were held bi-monthly and were open to the public, and said that she would send a link to the Clerk to forward to the Board.

Board Member Jeff Griffiths added to his report that architects were currently in the process of developing the site plans for the Eastern Sierra Small Business Resource Center (ESSBRC) and said that the consultant had developed a business plan for the center, and offered to set up a presentation for the ESCOG. Mr. Griffiths reported that Inyo County was working with RCRC on a broadband plan in anticipation of funding that should become available at some point in the future and discussed potential new broadband vendors and technologies. He reported that the recall election of a County Supervisor in Shasta County had been organized by a militia and funded by a billionaire who had funded \$1M of the effort which succeeded.

Board Member Jim Ellis reported that Deston Dishion had been appointed as Acting Interim City Administrator for the City of Bishop. Mr. Ellis said that he had recently flown from Bishop to Denver. He reported that at the Bishop Airport (a.k.a. the Eastern Sierra Regional Airport BIH) there was no outdoor waiting areas where the passengers' luggage came out and said that it had been windy the day he had flown, and several people were waiting outside in the cold. He suggested that wind shelters be built. He also reported that the Bishop Police Department had been busy due to being short staffed, and said that the new Chief of Police had been filling openings. Mr. Ellis reported that the State had placed a large focus on housing, however, they were taking away a lot of the local control and lowering franchise fees. He said that he would attend the League of California Cities Desert Mountain League meeting at the end of the month at which time these issues would be discussed, and he would report back to the group on that conversation.

Chair John Wentworth welcomed Interim CA Dishion and announced that the Town of Mammoth Lakes (TOML) had been notified of an approval for substantial funding for The Parcel from the State, but said that relying on grants for housing would not solve the housing challenge.

Chair Wentworth said that TOML would also utilize funds from Transient Occupancy Tax (TOT) for housing and said that as a region we needed to look for ways to generate more revenue. He reported that the Town was in the process of renegotiating its contracts with local Non-governmental Organizations (NGOs) in an effort to make them more contract based with more specific deliverables. He said that satellites were compromising the night skies, said that the Visitor Connection Program could help engage our visitors without the need to invest in expensive technology, and reported that he was happy that no winter flights had been cancelled due to weather now that commercial flights were landing in Bishop.

There was discussion among members of the Board.

7. **REQUEST FOR FUTURE AGENDA ITEMS**

There were no future agenda items requested.

8. **ADJOURNMENT**

The meeting was adjourned at 3:09 p.m. to the next regular meeting schedule to be held on April 8, 2022.

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Angela Plaisted, Assistant Clerk



## Eastern Sierra Council of Governments (ESCOG) - Joint Powers Authority (JPA)

### Minutes of Special Meeting

March 4, 2022, 8:30 a.m.

437 Old Mammoth Road, Suite Z, Mammoth Lakes

Members Present: Chair John Wentworth, Vice Chair Dan Totheroh, Karen Schwartz, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Jim Ellis, Board Member Lynda Salcido

Members Absent: Board Member Stacy Corless

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#### 1. **CALL TO ORDER AND ROLL CALL**

Chair John Wentworth called the meeting to order at 8:30 a.m. in the Council Chamber at 437 Old Mammoth Road, Mammoth Lakes, CA. Members of the Board attended the meeting via videoconference.

#### 2. **PLEDGE OF ALLEGIANCE**

Board Member Bob Gardner led the Pledge of Allegiance.

#### 3. **PUBLIC COMMENTS**

Executive Director Elaine Kabala reminded the members of the Board to include the ESCOG on their Expanded Statement List when submitting their Form 700.

#### 4. **ASSEMBLY BILL 361 (AB 361) FINDINGS**

##### 4.1 **Consideration of A Resolution of the Board of Directors of the Eastern Sierra Council of Governments Regarding the Need for Continued Virtual Meetings to Protect Public Health**

Legal Counsel Grace Chuchla outlined the information in the staff report and reported that there had been discussion about the Governor rescinding Assembly Bill 361 (AB 361) since he may remove the state of emergency. Ms. Chuchla stated that there were bills in process to make virtual meetings a permanent feature. She discussed the possibility of holding split in person meetings, with half of the Board meeting in Mammoth Lakes and the other half meeting in Bishop.

Board Member Jeff Griffiths joined at 8:35 a.m.

Board Member Lynda Salcido joined at 8:38 a.m.

There was discussion between Ms. Chuchla, Executive Director Elaine Kabala, and members of the Board.

CONSENSUS: There was consensus from the Board to have a more detailed discussion with regard to returning to in person meetings at the April meeting.

Moved by Board Member Jeff Griffiths

Seconded by Board Member Bob Gardner

Adopt the resolution regarding virtual meetings for the protection of public health pursuant to Assembly Bill 361 (AB 361).

For (7): Chair John Wentworth, Vice Chair Dan Totheroh, Karen Schwartz, Board Member Bob Gardner, Board Member Jeff Griffiths, Board Member Jim Ellis, and Board Member Lynda Salcido

Absent (1): Board Member Stacy Corless

Carried (7 to 0)

5. **ADJOURNMENT**

The meeting was adjourned at 8:45 a.m. to the next regular meeting scheduled to be held on April 8, 2022.

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Angela Plaisted, Assistant Clerk

**RESOLUTION NO. 2022-\_\_\_\_\_**

**A RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE EASTERN SIERRA COUNCIL OF GOVERNMENTS  
REGARDING THE NEED FOR CONTINUED VIRTUAL MEETINGS TO  
PROTECT PUBLIC HEALTH**

**WHEREAS**, the COVID-19 pandemic continues to threaten the health and safety of communities within ESCOG’s jurisdiction since its inception in March 2020; and

**WHEREAS**, Governor Newsom has declared a state of emergency related to the COVID-19 pandemic; and

**WHEREAS**, the Health Officers for Inyo and Mono Counties have recommended social distancing and continued virtual meetings as a means to limit the spread of COVID-19, particularly the highly contagious Delta variant. These recommendations are attached hereto as Exhibit A.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of ESCOG that

1. The Board has considered the circumstances of the state of emergency related to COVID-19 and declared by Governor Newsom.
2. The Board finds that the above-mentioned state of emergency directly impacts the ability of ESCOG to meet safely in person because in person meetings, particularly with the public present, increase the likelihood that COVID-19 will be transmitted throughout the community.
3. Local officials—specifically the Health Officers of Inyo and Mono Counties—continue to recommend measures to promote social distancing.

**PASSED AND ADOPTED** 8<sup>th</sup> day of April, 2022 by the following vote:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

ATTEST: \_\_\_\_\_  
Secretary

\_\_\_\_\_  
John Wentworth  
Chairperson



# MONO COUNTY HEALTH DEPARTMENT

## Public Health

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P.O. BOX 476, BRIDGEPORT, CA 93517 PHONE (760) 932-5580 • FAX (760) 932-5284  
P.O. BOX 3329, MAMMOTH LAKES, CA 93546 PHONE (760) 924-1830 • FAX (760) 924-1831

To: Board of Supervisors

From: Bryan Wheeler, Director of Public Health

Re: Recommendation regarding Social Distancing and Virtual Meetings

Both Mono County “covering” Health Officer Dr. Rick Johnson and I strongly recommend that physical/social distancing measures continue to be practiced throughout our Mono County communities, including at meetings of the Board of Supervisors and other County-related legislative bodies subject to the Brown Act, to minimize the spread of COVID-19.

Whether vaccinated or not, positive individuals are contracting the Delta variant and infecting others in our communities. Social distancing and masking are crucial mitigation measure to prevent the disease’s spread. Virtual board meetings allow for the participation of the community, county staff, presenters, and board members in a safe environment, with no risk of contagion. It is recommended that legislative bodies in Mono County implement fully-remote meetings to the extent possible.

If you have any questions regarding this recommendation, please do not hesitate to contact me. We will continue to evaluate this recommendation on an ongoing basis and will communicate when there is no longer such a recommendation with respect to meetings for public bodies.



**HEALTH & HUMAN SERVICES DEPARTMENT**

*Public Health, Suite 203-C  
1360 N. Main Street, Bishop CA 93514  
TEL: (760) 873-7868 FAX: (760) 873-7800*

**Marilyn Mann, Director**  
*mmann@inyocounty.us*

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Date: September 23, 2021

To: Inyo County Local Agency Governing Bodies

From: Dr. James Richardson, Inyo County Public Health Officer

Re: Continued Recommendation Re Social Distancing and Remote Meetings

In order to help minimize the spread of COVID-19, I recommend that physical/social distancing measures continue to be practiced throughout our Inyo County communities, including at public meetings of the Board of Supervisors and other public agencies. Individuals continue to contract COVID-19 and spread the infection throughout our communities. Social distancing, masking, and vaccination are crucial mitigation measures to prevent the disease's spread. Remote public agency meetings allow for the participation of the community, agency staff, presenters, and board members in a safe environment, with no risk of contagion. As such, and since this disease negatively and directly impacts the ability of public agencies to conduct public meetings safely in person, it is my recommendation that local public agencies conduct their public meetings remotely.

This recommendation will remain in place until further notice.

Dr. James A. Richardson  
Inyo County Health Officer





## STAFF REPORT

**To:** ESCOG Joint Powers Authority  
**From:** Elaine Kabala, ESCOG Staff  
**Subject:** ESCOG Staff Coordination with Regional Leadership  
**Meeting date:** April 8, 2022  
**Prepared on:** March 31, 2022  
**Attachments:** A) ESCOG Organizational Map

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### **BACKGROUND/HISTORY:**

At the February 4, 2022 ESCOG meeting, the Board gave staff direction to meet with the regional managers to discuss the organization's mission, purpose and projects, potential candidates for future programs of work and technical guidance for scaling the ESCOG organization.

Staff met with the Administrators and Managers for Inyo County, Mono County, City of Bishop and Town of Mammoth Lakes as directed.

### **BUDGET IMPACTS:**

None.

### **LEGAL REVIEW:**

ESCOG Counsel Grace Chuchla has reviewed this item and found that it complies with the law.

### **RECOMMENDATION:**

Staff requests the Board receive an update on the conversations with regional leadership and direct staff to develop a draft resolution in collaboration with regional leadership empowering the ESCOG to initiate a program of work related to regional economic development and housing opportunities.

# EASTERN SIERRA COUNCIL OF GOVERNMENTS

## Organization

### Eastern Sierra Council of Governments Board of Directors

### Executive Director

#### SREMP - Activated

##### Sustainable Recreation

- BIRPI
- Towns to Trails
- VCP
- Scenic Byway
- Campground Improvements\*
- Regional Rec. Capacity\*
- Climate Adaptation

##### Eco. Management

- CDFW / Pace and Scale Accelerator\*
- Climate Adaptation
- Wildfire Task Force

#### Econ. Dev.

- CEDS Development
- CERF Development
  - Phase 1: Planning
  - Phase 2: Implementation

#### Housing

- Housing Roundtable / Partnership meetings
- Regional Housing Plan (?)

#### Outreach and Advocacy

- Regional coordination with local partners
- Land management partnership building
  - USFS / BLM / NPS / LADWP
- Regional advocacy w/ State/Fed agencies
- Branding / Outreach / Website

#### Funding

- Member agency contributions
- CDFW Prop 1 grant
- NFWF BIRPI grant
- Sierra Nevada Conservancy grant
- Potential USDA Strategic Economic and Community Development grant
- Potential American Rescue Plan Funds

#### Funding

- Member agency contributions
- Inyo Co. RCRC CEDS grant
- CERF funding

#### Funding

- Member agency contributions
- REAP 2.0

#### Funding

- Member agency contributions



## STAFF REPORT

**To:** ESCOG Joint Powers Authority  
**From:** Elaine Kabala, ESCOG Staff  
**Subject:** Inyo National Forest / ESCOG Inter-agency Coordination Funding  
**Meeting date:** April 8, 2022  
**Prepared on:** March 31, 2022  
**Attachments:** A) Draft Scope of Work for Potential Inyo National Forest / ESCOG Business Plan

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### **BACKGROUND/HISTORY:**

The Inyo National Forest (INF) is interested in supporting the ESCOG's Sustainable Recreation and Ecosystem Management Program (SREMP) as it has the potential to bring added capacity to further the mission of the INF and bring added value to the region through increased revenues and recreation opportunity as well as providing critical needs around forest health and fuels management to reduce the risk of loss due to wildfire. The INF is invested in establishing an informed partnership between the INF and the ESCOG, and in better integrating regional efforts between local, State and Federal partners for the successful stewardship of public land resources in the Eastern Sierra and sustainable community and economic development for gateway communities to the Inyo National Forest.

The INF has proposed an opportunity to provide funding to the ESCOG to establish inter-agency coordination opportunities and procedures between the ESCOG and INF, develop and expand the collaborative list of projects for the ESCOG partnership between the INF and other land management agencies, establish operational procedures for inter-jurisdictional project implementation between the INF, ESCOG, and other partners, and act as point of contact and liaison between the INF/ESCOG and other partner agencies. The funding is proposed to be in place for up three years, and the funding is proposed to be housed within the ESCOG.

The scope of work can be contracted to a consultant; however the INF would like to base the position in the Eastern Sierra to ensure relationship building (Attachment A).

**BUDGET IMPACTS:**

The INF is proposing up to \$150,000 to fund the scope of work.

**LEGAL REVIEW:**

ESCOG Counsel Grace Chuchla has reviewed this item and found that it complies with the law.

**RECOMMENDATION:**

Staff requests the Board discuss the Inyo National Forest ESCOG inter-agency coordination scope of work and provide direction to staff to partner with the INF to request funding from the U.S. Department of Agriculture.

*Background:* The Eastern Sierra Council of Governments (ESCOG) is a relatively new joint powers authority (JPA) agency made up of the Town of Mammoth Lakes, City of Bishop, and Inyo and Mono Counties. The ESCOG is empowered to work across jurisdictional boundaries on recreation and forest management projects important to the region by the Sustainable Recreation and Ecosystem Management Program (SREMP), which was adopted by resolution of all four member agencies. The SREMP recognizes the essential connection of public lands to the sustainable recreation and sustainable tourism activities that are the foundation of the cultures and economies of the Eastern Sierra, as well as the escalating hazard that wildfire poses to Eastern Sierra communities and their economic dependence on recreation opportunities.

The ESCOG is empowered by this resolution to pursue funding to further the work that is important to the economy and security of the Eastern Sierra region. The Inyo National Forest (INF) is interested in supporting this JPA Agency as it has the potential to bring added capacity to further the mission of the INF and bring added value to the region through increased revenues and recreation opportunity as well as providing critical needs around forest health and fuels management to reduce the risk of loss due to wildfire. The INF is invested in establishing an informed partnership between the INF and the ESCOG, and in better integrating regional efforts between local, State and Federal partners for the successful stewardship of public land resources in the Eastern Sierra and sustainable community and economic development for gateway communities to the Inyo National Forest.

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**Position Title:** Inter-agency Liaison

**Term:** Up to 3 years, potential to continue depending on need and funding

**Host Entity:** Eastern Sierra Council of Governments

**Supervisory Responsibilities:** None, but may lead others

**Base of Operation:** Bishop, CA, but may travel throughout the Eastern Sierra region

**Salary:** negotiated

**Duties, Responsibilities and Type of Work to be Performed:** As guided by the Inyo National Forest (INF) and the ESCOG, this liaison will be responsible for the following duties:

**Coordination (30%)**

- Develop and expand the collaborative list of projects for the ESCOG partnership between the INF and other land management agencies and the ESCOG members, including:
  - Develop a list of work that is prioritized, with partner input, so there is a shared vision for implementation. In addition, develop a reasonable schedule for planning/implementation of this prioritized work.
  - Develop budget estimates for project implementation.
  - Identify potential revenue/funding/financing opportunities for this prioritized list.

- Leverage established relationships with current partners in order to capitalize on funding opportunities and overcome challenges with respective partners.
- Work with the INF to understand and communicate operational procedures for inter-jurisdictional project implementation between the INF, ESCOG, and other partners, including but not limited to:
  - Financial procedures, in particular identifying potential obstacles presented by using different funding sources
  - Project approval requirements
  - Appropriate contracting mechanisms for project implementation.
- Act as point of contact and liaison between the INF/ESCOG and other partner agencies.
- Assist with the development of funding requests, in support of this work, where applicable.

### **Overall Project/Program Management (50%)**

- Manage and oversee the development and modification of the prioritized project list and schedule:
  - Develop a clear, concise template for reporting the priorities and progress towards achieving them. Track the progress over time and report this to the INF/ESCOG and other partners.
  - Help identify and overcome challenges to progress.
  - Compile and consolidate information and data from partners
  - Write, edit, and design reports
  - Coordinate and facilitate meetings between the INF/ESCOG and other partners
  - Assure quality control of data reported
  - Track annual funding contributions from partners and help leverage this funding to secure additional funds to increase the pace and scale of work.

### **Outreach (20%)**

- Manage and strengthen communications and collaboration between the INF/ESCOG and stakeholders, partners, and the public.
- Provide point of contact for data requests, and status updates.
  - Stays current on data sharing policies of individual partners.
- Plan and implement effective strategies for communicating relevant direction, accomplishments, and ongoing work, including:
  - Website posts and updates
  - Coordinate with agency public affairs officers and partners to share information through their respective outreach and media channels
  - Email marketing and Newsletter for relevant projects
  - Writing success stories and developing outreach products (brochures, science communication articles, videos, merchandise, posters, giveaways, etc.)

- Giving presentations about priorities and progress as well as working to host additional experts for public outreach events.

## **Deliverables**

- Sustainable Recreation and Ecosystem Management Project Implementation Plan including:
  - Project list mutually developed by Inyo National Forest and ESCOG
    - Project timelines
    - Project environmental clearance requirements/status
  - Communications and outreach plan
  - Interagency project coordination plan for each agency
  - Inventory of potential funding sources and financing organizations and develop a proposed fiscal administration structure



## STAFF REPORT

**To:** ESCOG Joint Powers Authority

**From:** Elaine Kabala, ESCOG Staff

**Subject:** Consideration and Direction Regarding Proposals received in response to the Eastern Sierra Pace and Scale Accelerator Project Request for Proposals for Environmental Management Services

**Meeting date:** April 8, 2022

**Prepared on:** March 29, 2022

**Attachments:** A) Proposal Provided by The Whitebark Institute  
B) Proposal Provided by Cardno (now Stantec)

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### **BACKGROUND/HISTORY:**

The Eastern Sierra Council of Governments (ESCOG) was awarded a California Department of Fish and Wildlife (CDFW) Proposition 1 grant on June 15, 2021 in the amount of \$3,384,269 for the Eastern Sierra Pace and Scale Accelerator project under authority of the Sustainable Recreation and Ecosystem Management Accelerator (SREMP). The Eastern Sierra Pace and Scale Program aims to increase local capacity for environmental planning in the Eastern Sierra by investing in dedicated professionals to build a locally based workforce in the area of environmental planning. The pilot project for development local environmental planning capacity to be funded by the grant is the Eastern Sierra Climate & Communities Resilience Project (ESCCRP), which is a landscape level restoration and fuels treatment project in the Mammoth Lakes area.

On February 19, 2022, the ESCOG noticed a Request for Proposals (RFP) to provide National Environmental Policy Act services for the Eastern Sierra Pace and Scale Accelerator. The ESCOG received two proposals: one from the Whitebark Institute, in partnership with Panorama Consulting and the Great Basin Institute, and the other from Cardno (now Stantec). The budget proposed by The Whitebark Institute was in the amount of \$2,100,903.20. The budget proposed by Cardno (now Stantec) was in the amount of \$1,705,280. The grant budget for environmental planning services is \$2,511,375.08.



The selected consultant will be responsible for two distinct deliverables: 1) staffing and managing a full interdisciplinary team (IDT) as described below, capable of conducting the necessary studies and environmental analysis for required environmental compliance on Federal USFS lands, resulting in a Federal Decision for the ESCCRP; 2) conducting surveys needed on 10,000 priority acres to prepare them for immediate implementation pending completion of the NEPA decision.

Environmental planning capacity shortages in the eastern Sierra have burdened the region for decades and the ESCOG's Eastern Sierra Pace & Scale Accelerator grant award is aimed at holistically solving this persistent issue in the region. Upon identification of the ideal candidate, the desire of the ESCOG is to establish a professional relationship with this third-party IDT, in an attempt to build long-overdue environmental planning capacity in the Eastern Sierra. It is the ESCOG's intent that this IDT will be available for other future SREMP projects and will help to address growing pace and scale needs in the region.

#### **ANALYSIS/DISCUSSION:**

At the meeting in October, the ESCOG Board established a subcommittee to assist with scoring proposals in response to the RFP. The Inyo National Forest, which will be a partner to the implementation of the Eastern Sierra Pace and Scale Accelerator project, also volunteered to assist with scoring the proposals.

At the time the agenda for the April 8, 2022 meeting was published, the proposals were still under consideration. The subcommittee may request additional information or chose to hold interviews prior to recommending an award.

At the October 8, 2021 meeting, the Board authorized the subcommittee to review and approve agreements for the project management and implementation consultant and environmental planning consultant, and authorized the Executive Director to negotiate and execute agreements with each consulting team upon recommendation from the ESCOG subcommittee, if necessary to meet project deadlines due to the ESCOG's bi-monthly meeting schedule.

#### **BUDGET IMPACTS:**

The grant award is for \$3,384,269. The allocated budget for ESCOG staff to administer the grant is \$123,790, plus \$5,000 in indirect cost recovery for each subcontractor, for a total of \$10,000.

#### **LEGAL REVIEW:**

ESCOG Counsel Grace Chuchla has reviewed this item and found that it complies with the law.

**RECOMMENDATION:**

Staff requests the ESCOG Board receive an update on the recommendation of the scoring committee. Following that update, staff requests that the Board:

1. Choose a preferred consultant from the two proposals received
2. Direct Executive Director Elaine Kabala and Consultant Janet Hatfield to negotiate and finalize an agreement with the preferred consultant
3. Direct Executive Director Elaine Kabala to return to the Board with finalized agreement for approval.

March 19, 2022

Ms. Elaine Kabala  
Administrative Services Contractor  
Eastern Sierra Council of Governments  
[ekabala@escog.ca.gov](mailto:ekabala@escog.ca.gov)



Dear Ms. Kabala:

I am pleased to be submitting a proposal on behalf of the Whitebark Institute of Interdisciplinary Environmental Sciences in response to the “Request for Proposals to Provide National Environmental Policy Act Services for the Eastern Sierra Pace and Scale Accelerator” as issued by the Eastern Sierra Council of Governments in February 2022. We believe our approach to this RFP is unique in that it (1) commits to creating a locally-based interdisciplinary team of NEPA planners and specialists and (2) partners with other organizations with considerable NEPA planning experience to leverage their skill and expertise.

In addition to this cover letter, you will find a Technical Proposal and a Cost Proposal as separate documents.

We appreciate the opportunity to be considered for this project. Please do not hesitate to contact me with any questions.

Sincerely,

A handwritten signature in cursive script that reads "Holly Alpert". The ink is dark and the signature is fluid and legible.

Holly Alpert, Ph.D.  
Executive Director  
Whitebark Institute  
[holly@whitebarkinstitute.org](mailto:holly@whitebarkinstitute.org)  
760-709-2212



# A Proposal for NEPA Services for the Eastern Sierra Pace and Scale Accelerator

## Scope of Work Understanding

The California Department of Fish and Wildlife awarded the *Eastern Sierra Pace & Scale Accelerator* grant to the ESCOG to try a different approach for conducting environmental analyses of forest restoration projects on the Inyo National Forest. Forest Service managers and local government officials have long acknowledged that the Inyo National Forest simply does not have sufficient staff or funding to perform its own environmental review of landscape-level forest health projects such as the Eastern Sierra Climate and Communities Project (ESCCRP). In addition, funding available to the Inyo National Forest has been inadequate to consider contracting with large environmental consulting firms. Therefore, the Whitebark Institute of Interdisciplinary Environmental Sciences (Whitebark) is proposing a new approach to conducting environmental analyses of forest restoration and related projects in a cost- and time-efficient manner. To ensure that the environmental review of the ESCCRP is thorough and of the highest quality, Panorama Environmental, Inc., Great Basin Institute, and Spatial Informatics Group will work with Whitebark and apply their considerable expertise and experience with NEPA preparation to the project.

The essence of our group's proposal is to create a locally-based interdisciplinary team (IDT) to work in concert with the Inyo National Forest's internal IDT and other Forest Service staff. A team of professionals in relevant disciplines that reside in Mono and Inyo counties will be formed to conduct the environmental analyses described in the RFP. Until the CDFW award to the ESCOG and the prospective award of this contract to Whitebark, such capability has not existed in the eastern Sierra Nevada region. Leaders of the ESCCRP and Regional Forest and Fire Capacity Program designed the original proposal to CDFW to provide sufficient funding to build a local IDT that can perform environmental review services for the Inyo National Forest and other east-side entities working on forest health and related projects. By creating this critical local capacity for environmental analyses now, such services will continue to be available after the term of this contract for ESCOG projects that fall within the Sustainable Recreation & Ecosystem Management Program (SREMP) as well as for other similar efforts. Building this local IDT addresses a longstanding barrier to completing important projects for regional resilience in the eastern Sierra Nevada.

Although individual members of the IDT will have deep and diverse experience in their respective disciplines, the team will be new and therefore capable of fresh thinking, creativity, and a quest for efficiency. We believe that the local knowledge and familiarity with the geography and natural resources of the eastern Sierra Nevada of our IDT balances relatively less experience with NEPA procedures. This new IDT will operate under the direction and guidance of the IDT of the Inyo National Forest and Panorama Environmental, Inc. to ensure that the environmental documents produced for the ESCCRP conform to all NEPA standards and practices. Furthermore, mentorship by the INF's internal IDT will lead to final documents closely aligned with the new Forest Plan, forthcoming Forest-wide prescribed fire NEPA, USDA-FS R5 and State of California Shared Stewardship Agreement, local resource protection priorities, philosophies, and regional public preferences.

The critical products generated under this contract will be all appropriate environmental planning documents necessary to yield a Decision Notice for the ESCCRP by the Inyo National Forest under NEPA.

Although the products will be developed under the guidance of the IDT of the Inyo National Forest to meet or exceed the standards of the Forest Service and NEPA laws and rules, our team will explore fresh approaches to generating the documents in the most efficient manner possible. Wherever possible, our IDT will create documents and procedural guides (somewhat analogous to Mono County's Master Environmental Assessment and the Eastern Sierra Riparian Areas Environmental Assessment recently created by the Great Basin Institute for the Regional Forest and Fire Capacity Program) that can be used for subsequent analyses with the addition of site-specific information.

The other main product of our effort will be an interdisciplinary team local to the eastern Sierra Nevada that is fully capable of conducting thorough environmental analyses of forest health and related projects. If an existing consulting firm, regardless of its qualifications and experience, from elsewhere in California or another state were to conduct the NEPA work for the ESCCRP, the region would be left in the status quo of a persistent bottleneck of NEPA and CEQA compliance without gaining capacity. The CDFW has allocated this grant to the ESCOG to both complete environmental review for the ESCCRP and create local capacity to continue analyses for subsequent SREMP and other projects.

### Technical Approach by Task

If awarded this contract, Whitebark and partners (Panorama Environmental, Inc., Great Basin Institute, and Spatial Informatics Group) will immediately begin assembling the interdisciplinary team. Because a major goal of the CDFW grant is to create a local IDT, this team must be hired after the contract is in place. Several prospective members have been recruited and are awaiting the decision about the ESCOG contract. We believe most of the IDT can be hired within a month of the contract becoming final. Whitebark staff, through previous natural resources-related work, has established relationships with all relevant Inyo National Forest staff and ESCCRP stakeholders and partners. The Whitebark IDT will make every effort to meet in the first few weeks of the project with all Inyo National Forest IDT staff and line officers, subcontractors, and partners to identify roles and responsibilities as well as deliverable timelines, so the project can begin moving in the right direction from inception, and lines of communication and program processes are clearly identified.

As soon as a critical mass of the new IDT is working, the following preparatory steps will be undertaken by the team: detailed review of the Proposed Actions and supporting parts of the Inyo's Land Management Plan; review of existing NEPA documents and specialist reports for similar projects in and near the ESCCRP area (e.g., Mammoth Lakes Basin, Reds Meadow, Three Creeks, Sherwin to Scenic, Jeffrey Pine, 395 Median) to identify common resource issues; review of other regional environmental documents (e.g., Mono County Master Environmental Assessment, GBI's Riparian Fuels Assessment, Upper Owens Watershed Assessment, Inyo-Mono IRWMP Plan) to gather additional localized information; and review of condition-based NEPA documents for forest health projects considered to be good examples by the Inyo and other National Forests. Specialists on the Whitebark IDT will work with their peers on the Inyo IDT to facilitate transfer of institutional and site-specific knowledge into the NEPA documents. Additionally, GBI will use a USFWS tool to identify T&E species at the outset.

The first three tasks in the table on page 10 of the RFP are beyond the scope of this contract, and the first two of those have been completed by the Inyo National Forest. The third task is a procedural matter between the ESCOG and the contractor. Therefore, our Technical Approach begins with the fourth task in the table and is organized by the tasks mentioned in the remainder of the table (except for the final line, which is legally a Forest Service matter). The due-dates for deliverables given in that table are acknowledged and copied below.

**Scope of Work Development/Finalization**

**June 2022**

Plan field work to be conducted during 2022

Work with Inyo IDT and technicians in the field initially to share methods and knowledge

## Attachment A

<b>Public Scoping</b> Develop scoping documents and obtain District Ranger / Forest Supervisor approval Mail/email tribal and public scoping letters Hold public meetings Analyze and summarize scoping comments	<b>August 2022</b>
<b>Finalize Analysis Area and Proposed Action (Issue &amp; Alternative Development)</b> Based on scoping comments received, develop issues and alternatives Draft Scoping Outcome Summary (SOS) After review by District and Supervisor's Office staff, obtain official approval of SOS	<b>October 2022</b>
<b>Specialist Reports and Implementation Plan Draft</b> Based on 2022 field season, recommend project design features and changes to PA Plan field work to be conducted during 2023 Draft chapters on purpose-and-need and alternatives including proposed action Draft resource reports Draft chapter on affected environment and environmental consequences and appendices (as needed) Incorporate vetted design elements into chapters as appropriate	<b>January 2023</b>
<b>Complete Analysis and Implementation Plan</b> Ensure design and planning elements are linked directly to INF's Land Management Plan Determine relevance of past legal challenges to INF NEPA work and address if needed Review of drafts by District and Supervisor's Office Complete any identified gaps and address review comments Obtain official approval of analysis	<b>May 2023</b>
<b>30-day comment period</b> Develop material for comment period Review of comment period materials by District and Supervisor's Office Finalize materials for comment period and submit legal notice to paper of record Distribute materials for comment period Comment period of 30 days begins after legal notice has been published	<b>June 2023</b>
<b>Editing the EA and Draft Decision Notice</b> Complete draft of Decision Notice (or Finding of No Significant Impact if appropriate) Update the substantive chapters and specialist reports based on new field information Review of Decision Notice by District and Supervisor's Office Finalize draft of Decision Notice	<b>October 2023</b>
<b>Objection Period</b> Develop material for objection period Review of objection period materials by District and Supervisor's Office Finalize materials for objection period and submit legal notice to paper of record Distribute materials for objection period Objection filing period of 45 days begins after legal notice has been published	<b>November 2023</b>
<b>Objection Review Period</b> Finalize project record and index for objection review Objection review period of 45 days and potential extension of up to 30 days if needed	<b>February 2024</b>
<b>Finalize Decision Notice (and edit EA as necessary)</b> Update all substantive NEPA documents as necessary and finalize Decision Notice as necessary Develop material for decision distribution Review of all documents by District and Supervisor's Office Distribute decision material Complete procedural guides & templates for future EAs	<b>April 2024</b>

Our group will complete Tasks 1-8 as described in pages 7-10 of the RFP and additional tasks for each topical assessment that are found to be necessary during the course of the project to produce an outstanding environmental document.

Task 8, the CEQA Planning Assessment, differs from the other tasks and is addressed here. Although a completed EIR or other CEQA document is not a required outcome of this award, Whitebark will work with the ESCOG's Accelerator Project Manager to determine the most efficient and cost-effective strategy if the Senate Bill 901 exception ceases during the course of project implementation. SB 901 allows a NEPA document to suffice for CEQA review where State discretionary approval is also needed, such as for projects entirely on Forest Service lands with funding by CAL FIRE grants. The annual decision by the California Natural Resources Agency about whether to renew this provision of SB 901 creates great uncertainty for project and budget planning. If necessary, other efficient options may also be available, such as preparing an EA compliant with CEQA under CEQA Guidelines Section 15221, which requires a nominal amount more work to address CEQA topics in the EA, while utilizing a single NEPA process. Non-federal lands may then be covered under the streamlining process through CAL FIRE's California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR). As a minimum, Whitebark and partners will work with CAL FIRE and ESCOG legal counsel to determine the best approach for CEQA compliance (e.g., a Program EIR), identify the appropriate lead agency, draft a scope of work to complete the CEQA documents, and draft a budget for that work. If the cost-efficiencies for the NEPA work proposed by Whitebark are realized, we anticipate there may be sufficient surplus to enable completion of any CEQA crosswalk steps necessary for CEQA completion as an outcome of this project, should time and budget allow. Any additional surplus might be considered for CEQA work on the small units of non-federal land within the overall ESCCRP.

## Qualifications of Proposed Personnel

**Holly Alpert, Ph.D.**, founded the Whitebark Institute in 2013 as a way to provide institutional backing for interdisciplinary environmental problem-solving efforts in the eastern Sierra. Dr. Alpert has been working in natural resources research, planning, management, project administration, and capacity building in the eastern Sierra since 2003. Because of her management of the Inyo-Mono Integrated Regional Water Management Program, Dr. Alpert was hand-selected in 2020 by the Sierra Nevada Conservancy to lead the Regional Fire and Forest Capacity Program for the SNC's east subregion.

**Tania Treis** is the founder and majority owner of Panorama where she oversees company operations. Tania brings a broad knowledge of CEQA, NEPA, and the regulatory process to the projects and programs that she leads. She has managed the preparation of hundreds of environmental studies including permitting due diligence, environmental programs, plans of development and operation, ISs, EIRs, EAs, and EISs. Tania has led several CEQA and NEPA projects in Inyo and Mono counties since 2004.

**Jerry Keir** is the co-founder and Executive Director of the Great Basin Institute. For the past twenty-two years, Jerry has taught and directed interdisciplinary research and field studies throughout the Intermountain West. Jerry has extensive experience managing diverse research and monitoring initiatives, as well as leading collaborative conservation projects at a landscape scale and has overseen \$100 million in grants and contracts for the Institute.

**Jason Moghaddas** is a Registered Professional Forester with Spatial Informatics Group and has more than 20 years of experience in natural resource project planning and management. As project manager for the Fire and Fire Surrogate Study, Jason successfully coordinated an interdisciplinary team studying effects of fuel treatments on mixed conifer ecosystems. Jason was part of a USFS IDT on the Plumas National Forest to plan and conduct NEPA analysis for landscape-level fuel treatments.

**Taro Pusina** is a Wildland Fire and Fuels Specialist with over 25 years of fire experience. Now working with Spatial Informatics Group, Taro previously worked for Yosemite National Park, BLM, and Inyo National Forest in fuels, prescribed fire and wildland fire positions. He is also a fire behavior analyst on an interagency incident management team.

**Paul Lackovich** is an NWCG qualified Geographic Information Systems Specialist with Spatial Informatics Group. Paul has provided GIS support to Federal and State Incident Management teams on over 40 major wildland fires across California and the Southwest. He brings with him an extensive knowledge of incident GIS and wildland fire operations. Paul has also worked extensively on wildland fire mitigation.

**Rick Sweitzer, Ph.D.**, is a Wildlife Biologist & NEPA Specialist at the Great Basin Institute with 35 years of research, compliance, and environmental planning experience in the West. In addition to experience with Biological Assessments/Evaluations and Management Indicator Species Reports for NEPA and ESA compliance, Dr. Sweitzer has completed long-term research on the population biology of Pacific fishers in the southern Sierra Nevada, including how they respond to forest fuels reduction and wildfire.

**Sean Simpson, MA**, is the Great Basin Institute's Senior Consulting Archeologist and has expertise in NEPA compliance inventories on Bureau of Land Management, National Park Service and Forest Service lands across the West. Recent archaeological work includes completing section 106 requirements for the Castle Fire (Sequoia NF), Harvey Fuels Reduction Project (Lassen NF), and the Carr Fire.

**Rick Kattelmann, Ph.D.**, is a hydrologist and the sole or lead author of more than 100 scientific papers, major chapters of Sierra Nevada Ecosystem Project, watershed assessments and plans for each river basin of Mono County, parts of Inyo-Mono Integrated Regional Water Management Plan, and parts of Mono County's Master Environmental Assessment. He has provided technical arguments in successful NEPA and CEQA legal cases.

#### **Interdisciplinary Team staffing plan**

The intention, as described in this proposal, is to build a locally-based interdisciplinary team to be available for this effort as well as other environmental planning needs within ESCOG's SREM Program. However, recognizing that the Whitebark Institute is a nascent organization, we have sought partnerships with other, more experienced organizations to provide mentoring and guidance.

As examples of the types of planning and specialist positions needed for this work, the Whitebark Institute will seek to hire the following positions locally:

- **IDT Lead:** gathers all appropriate information in order to develop the current and long-range project planning in the ESCCRP project area; supports resource specialists working on the IDT as they work through the evaluation, analysis and documentation concerning the proposals and decisions in EISs, EAs, and/or CEs.
- **Botanist:** conducts and oversees vegetation inventories, population, and community monitoring in compliance with selected protocols to contribute to the project's baseline data for botanical resources and coordinating surveys for special status plants and noxious weeds.
- **Hydrologist:** collects, analyzes, and interprets watershed data for input to environmental planning documents; conducts water resource inventories following established procedures to assemble databases required to support NEPA analysis and Inyo NF planning.
- **Recreation Specialist:** analyzes and determines the effects of proposed actions on recreation activities and associated natural resources and prepares environmental assessments and reports to document findings; coordinates with other natural resource disciplines to ensure program requirements are included in the project planning and execution.
- **GIS Specialist:** works with resource specialists to determine type, amount and level of information required to develop and analyze ecosystem mgmt alternatives; develops data dictionaries, models, and metadata for multi-disciplinary information & geospatial applications.

The Whitebark Institute will also staff an Executive Director to provide organizational supervision, a non-profit administrator to perform contract administration, and a field crew for resource surveys. Panorama Environmental will staff senior-level NEPA planners, who will provide mentoring and



oversight to the Associate NEPA Planner and resource specialists and who will support the development of the NEPA document and monitoring plan. In addition to the Wildlife Biologist position, Great Basin Institute will staff the Cultural Resources Specialist and field crews, who will plan, direct, coordinate, and execute surveys for the location and verification of archeological and historical sites. Spatial Informatics Group will provide fire and fuels analyses, plans for monitoring, and GIS support.

## Past Performance

The initial staff of the Whitebark Institute has been thoroughly involved with the ESCCRP from the very beginning in late 2019. This familiarity with the project concept and scope, local environment and natural resources, Inyo National Forest staff, and proposed actions is critical to production of excellent NEPA documents in a cost-efficient manner. Whitebark Institute personnel have formed and led several collaborative efforts related to addressing natural resource issues in the eastern Sierra Nevada, including the Regional Forest and Fire Capacity Program and the Inyo-Mono Integrated Regional Water Management Program. If selected for this contract, the Whitebark leadership can begin work immediately without a lengthy start-up.

Panorama Environmental has led the preparation of hundreds of CEQA documents from Categorical Exclusions to complex Program EISs and EIRs. More than two dozen of these projects have been in Mono and Inyo counties. In the past few years, the firm has led inter-disciplinary teams of experts to prepare landscape-scale vegetation and fuels management plans and environmental documents for Midpeninsula Regional Open Space District, Marin Municipal Water District, Marin Wildlife Prevention Authority, Alpine County, and others.

The Great Basin Institute is an interdisciplinary field studies organization that promotes environmental research, education, and conservation throughout the West. Founded in 1998 at the University of Nevada, GBI advances applied research to support science-based adaptive management of public lands. GBI provides NEPA support services throughout Region 5 of the USFS and recently completed a master environmental assessment for riparian fuels treatments in the eastern Sierra Nevada in cooperation with the RFFCP.

The Spatial Informatics Group team has worked in science-based wildland fire management, prescribed fire, mechanical fuels treatment planning, and post treatment and wildfire monitoring. SIG's team has extensive experience working on public lands, including the Inyo National Forest, Plumas NF, and Yosemite National Park. In addition, the team has worked on vegetation management planning on private, special district, and NGO lands across California. The SIG team includes a retired fire management officer for the Inyo NF who was actively involved in the early planning of the ESCCRP.

Regarding references, the Whitebark Institute, our partnership described here, and the proposed IDT are all new and do not have an existing clientele. Individually, the other three partners have extensive lists of clients. For example, clients of Panorama Environmental in the eastern Sierra Nevada include:

Alpine County Community Development Dept., [zwood@alpinecountyca.gov](mailto:zwood@alpinecountyca.gov), 530/694-1371

Mono County Community Development Dept., [commdev@mono.ca.gov](mailto:commdev@mono.ca.gov), 760/924-1800

Inyo County Public Works Dept., [merrante@inyocounty.us](mailto:merrante@inyocounty.us), 760/878-0201

## Contact Information

Holly Alpert, Ph.D., Executive Director

Whitebark Institute for Interdisciplinary Environmental Sciences

3577 Majestic Way, Bishop, CA 93514

760-709-2212

[holly@whitebarkinstitute.org](mailto:holly@whitebarkinstitute.org)

<http://whitebarkinstitute.org/>



# A Proposal for NEPA Services for the Eastern Sierra Pace and Scale Accelerator


## Cost Proposal

The Whitebark Institute of Interdisciplinary Environmental Sciences (Whitebark) and our partners propose to create a locally-based interdisciplinary team (IDT) to work in concert with the Inyo National Forest to conduct NEPA analyses for the proposed action described in the ESCOG RFP. We understand there are many uncertainties associated with this project, including but not limited to:

- the proposed action is only in initial-draft form and could conceivably change significantly
- the level of direct involvement by members of the Inyo NF IDT is unknown and may change
- the just-announced increase in staffing at the Inyo NF may increase their IDT capacity
- conditions experienced during the field surveys will control the amount of time required for the largest labor costs of the project
- some of project may be affected by changes in law (e.g., new Cat Ex rules in infrastructure law)
- CEQA applicability (e.g., SB 901 renewal status and other possible legislative changes)
- possibility of this EA leading to an EIS (as mentioned in the CDFW-ESCOG grant agreement)

Given the high level of uncertainty with many aspects of the project, our cost proposal is designed to be flexible and adaptable to the real-world situations we will encounter. As requested in the RFP, our proposal budget is in a not-to-exceed time-and-materials (mostly rate x hours) format. However, we interpreted that the last sentence of instruction for the cost proposal on page 11 of the RFP as intended to present the *maximum* “necessary to adequately achieve the stated scope of work” to be consistent with the not-to-exceed nature of the estimates. Therefore, the hourly rates are the upper-bounds of rates believed necessary to retain top-level talent to perform the range of professional work required by this project. These not-to-exceed rates also include some allowance for raises to exceptional people during the course of the project. Our estimates of time required to accomplish the vast array of sub-tasks of this project are also maxima believed to be necessary for successful completion. We recognize that the estimates of hours required for field surveys are high; however, we believe these would be the maximum number of hours needed to adequately survey 10,000 acres. We have included positions and sub-tasks in the budget that may be ultimately performed by the Inyo National Forest. However, inclusion of such items seemed appropriate in the not-to-exceed context. Because of all the uncertainties affecting this project, there is considerable uncertainty in the estimates of time for each sub-task. Actual time recorded will inevitably be different than these estimates, but we believe that on the average, these estimates will be upper-bounds and will not be exceeded. The not-to-exceed budget is \$2,100,903.20 (see table below).

Attachment A

Tasks		Project Administration & IDT Lead Hours	Senior NEPA Planners & Advisors Hours	Resource Specialist Hours	Field Crew Hours	Outreach, GIS, Technical Writing Hours	Labor Costs
Scope of Work Development/Finalization		150	10	480	80	50	\$ 62,150.00
Public Scoping		240	30	0	0	250	\$ 44,650.00
Finalize Analysis Area and Proposed Action (Issue & Alternative Development)		220	50	550	9000	60	\$ 520,200.00
Specialist Reports and Implementation Plan Draft		620	310	1860	80	430	\$ 292,850.00
Complete Analysis and Implementation Plan		130	10	200	0	90	\$ 36,100.00
30-day comment period		110	0	0	0	140	\$ 20,200.00
Editing the EA and Draft Decision Notice		270	190	780	9000	170	\$ 567,550.00
Objection Period		60	0	0	0	60	\$ 9,800.00
Objection Review Period		40	0	0	0	80	\$ 9,800.00
Finalize Decision Notice (and edit EA as necessary)		180	210	0	0	180	\$ 43,800.00
CEQA Planning Assessment		250	20	0	0	0	\$ 25,000.00
Project Administration		2480	80	0	0	0	\$ 156,400.00
<b>Labor Total</b>		<b>4750</b>	<b>900</b>	<b>3870</b>	<b>18160</b>	<b>1510</b>	<b>\$ 1,788,500.00</b>
General Operating Expenses							\$ 121,412.00
Indirect (10%)							\$ 190,991.20
<b>Total Proposal Cost</b>							<b>\$2,100,903.20</b>

We have also included a second estimate that complies with the explicit instruction on page 11 of the RFP to represent our estimates of the minimum costs necessary. The hourly rates for personnel with Panorama Environmental, Spatial Informatics Group, and Great Basin Institute are fixed and are close to their GSA rate schedules for consulting services for the federal government. The hourly rates for personnel to be hired or contracted by Whitebark are more flexible and will reflect professional-labor-market rates in Mono and Inyo counties when the project begins. To develop the lower-bound estimates, the rates for Whitebark personnel in the not-to-exceed budget were reduced by 25 percent. The minimum amounts of time required for each sub-task were similarly estimated by reducing the not-to-exceed amounts by 25 percent. This 25 percent reduction in both cases is, of course, arbitrary. However, it is our best guess of the potential cost savings in the unlikely event that almost everything works out favorably to reduce time and rates. We estimate that the minimum budget necessary to achieve the objectives of the project is \$1,357,094.

### Budget Justification

#### Salary and wages

The budget spreadsheet shows categories of personnel at various billing rates and hours allocations. Each category contains several positions. The categories are broken down as follows (with billing rates in parentheses):

#### Project Supervisor & ID Team Lead

- Project Supervisor (Whitebark Institute Executive Director Holly Alpert, \$100/hour)

## Attachment A

- Non-profit administrator (Simone Mata, Whitebark Institute, \$40/hour)
- Interdisciplinary Team Lead (to be hired by Whitebark Institute, \$80/hour)

### Senior NEPA Planners and Advisors

- Senior NEPA Planners and Advisors (Tania Treis, Panorama Environmental, \$200/hour; Jerry Keir, Great Basin Institute, \$120/hour)
- Senior NEPA Planner (Jessica Koteen, Panorama Environmental, \$165/hour)
- NEPA Planner (Panorama Environmental, \$135/hour)
- NEPA Analyst (Panorama Environmental, \$100/hour)
- Monitoring Plan Developer (Jason Moghaddas, Spatial Informatics Group, \$155/hour)
- Procedural Guide Writer (Rick Kattelman, Whitebark Institute, \$65/hour)

### Resource Specialists (some positions will be combined)

- Forest Ecologist (to be hired by Whitebark Institute, \$80/hour)
- Fire & Fuels Specialist (Taro Pusina, Spatial Informatics Group, \$155/hour)
- Botanist (to be hired by Whitebark Institute, \$80/hour)
- Wildlife Biologist (Rick Sweitzer, Great Basin Institute, \$80/hour)
- Wildlife Biology Assistant (to be hired by Whitebark Institute, \$60/hour)
- Aquatic Biologist (to be hired by Whitebark Institute, \$80/hour)
- Entomologist and Forest Pathologist (to be hired by Whitebark Institute, \$80/hour)
- Hydrologist (to be hired by Whitebark Institute, \$80/hour)
- Soils Specialist (to be hired by Whitebark Institute, \$80/hour)
- Air Quality Specialist (to be hired by Whitebark Institute, \$80/hour)
- Cultural Resources Specialist (Sean Simpson, Great Basin Institute, \$100/hour)
- Recreation Specialist (to be hired by Whitebark Institute, \$80/hour)
- Visual Resources/Aesthetics Specialist (to be hired by Whitebark Institute, \$80/hour)
- Natural Hazards Specialist (to be hired by Whitebark Institute, \$80/hour)

### Field Crews

- Cultural Resources Field Crew (Great Basin Institute, 5 people, \$60/hour/person)
- Field Program Coordinator (to be hired by Whitebark Institute, \$60/hour)
- Physical and Biological Resources Field Crew (to be hired by Whitebark Institute, 5 people, \$40/hour/person)

### Outreach, GIS, Technical Writing

- Public Outreach Specialist (to be hired by Whitebark Institute, \$80/hour)
- Technical Writer/Editor (to be hired by Whitebark Institute, \$80/hour)
- Senior Spatial Analyst (Paul Lackovich, Spatial Informatics Group, \$120/hour)
- GIS Specialist (to be hired by Whitebark Institute, \$80/hour)

The table below describes the primary duties and responsibilities of each position.

Position	Primary duties and responsibilities
<b>Project Supervisor</b>	The Project Supervisor will oversee the work of all Whitebark Institute staff members as described and provide institutional guidance as necessary. Work will include review of all contracts for services, employee hiring selections, HR and budget guidance and oversight, and overall programmatic support and partner relations for the ESCCRP team.

## Attachment A

<b>Position</b>	<b>Primary duties and responsibilities</b>
<b>Non-profit Administrator</b>	Conducts routine human resources and accounting services to include reviewing and entering payroll, review and acceptance of invoices, approval and issuance of paychecks, financial tracking via QuickBooks and other financial management software, and quarterly financial reports to Project Supervisor.
<b>IDT Lead</b>	Supervises and coordinates work of the interdisciplinary team. Coordinates all activities with the Inyo NF IDT. Writes portions of the EA.
<b>Senior NEPA Planners &amp; Advisors</b>	Provides guidance to NEPA planners and analysts on best practices and special matters, such as nuanced condition-based NEPA approaches. Advises all managers about procedures and products.
<b>Senior NEPA Planner</b>	Oversees the development of the EA documents and writes portions of the EA.
<b>NEPA Planners &amp; Analysts</b>	Writes much of EA based on contributions from resource specialists with input from Senior NEPA planner. Facilitates public engagement, scoping, and comment periods in association with Inyo NF staff.
<b>Monitoring Plan Lead</b>	Develops monitoring protocols specific to the ESCCRP in addition to those described in the Inyo NF Land Management Plan and other USFS Monitoring Guidance. Identifies established protocols and monitoring efforts by other National Forests and agencies. Ensures the monitoring developed is within the technical, financial, and staffing capability of the USFS and partners. Develops performance measures to be included with Monitoring Plan. Works with the Project Manager and Inyo NF IDT to maximize the learning opportunity the ESCCRP provides through the Monitoring Plan development.
<b>Procedural Guide Writer</b>	Documents the process of developing this environmental analysis in the form of procedural guides and templates to improve efficiency of subsequent forest health projects on Inyo NF.
<b>Resource Specialists</b>	All resource-specialist positions described below will work with their Inyo NF IDT colleagues to develop resource reports and components of the EA. The proportions of the total work load for each discipline done by the Whitebark IDT and the Inyo NF IDT are to be determined. In some cases, such as air quality and forestry where the RFP states the USFS has the matter covered, the Whitebark specialist may have only a minimal role such as document review or being trained for future projects.
<b>Forest Ecologist</b>	Evaluates impacts of the proposed action on residual forest.
<b>Fire and Fuels Specialist</b>	Evaluates impacts of the proposed action on wildfire risk and behavior.
<b>Botanist</b>	Evaluates impacts of the proposed action on plants other than trees, with special attention to invasive species. Reviews existing information and prepares report about at-risk species and their habitat. Conducts botanical surveys and assessments leading to a resource report and relevant maps. Prepares a weed risk assessment including weed spread mitigations.
<b>Wildlife Biologist</b>	Evaluates impacts of the proposed action on resident wildlife, with special attention to threatened and endangered species (including CA-listed species with respect to CEQA). Reviews known information about at-risk species habitat. Conducts and supervises habitat mapping and assessments. Works with USFS & USFWS to produce a Biological Opinion for any species with federal status.
<b>Wildlife Biology Assistant</b>	Assists the wildlife biologist as needed. Conducts and supervises field surveys of wildlife and their habitat.
<b>Aquatic Biologist</b>	Evaluates impacts of the proposed action on fisheries and aquatic invertebrates.
<b>Entomologist &amp; Forest Pathologist</b>	Evaluates impacts of the proposed action on forest insects and diseases.

## Attachment A

<b>Position</b>	<b>Primary duties and responsibilities</b>
<b>Hydrologist</b>	Evaluates impacts of the proposed action on the hydrologic cycle and water quality. Maps waterways, wetlands, meadows, springs, other water features, and buffer zones using Lahontan RWQCB definitions. Prepares cumulative watershed effects analysis using the Equivalent Roaded Area method. Prepares a Watershed Report that analyzes project effects to water quality, water temperature, stream morphology, etc. Prepares a Timber Waiver application in consultation with the Lahontan RWQCB. Plans design features and proposed action mitigations or alternatives based on analysis findings.
<b>Soil Scientist</b>	Evaluates impacts of the proposed action on soil productivity and potential erosion. Contributes findings to the Watershed Report mentioned above.
<b>Air Quality Specialist</b>	Evaluates impacts of the proposed action on air quality, with special attention to smoke.
<b>Cultural Resources Specialist</b>	Evaluates impacts of the proposed action on cultural resources. Prepares an archaeological assessment and Archaeological Project Effects Analysis Report.
<b>Cultural Resources Field Crew</b>	Surveys priority areas that do not have existing up-to-date records. Records all newly discovered prehistoric, ethnographic, and historical heritage resources using USFS R5 standards and State Historic Preservation Office site forms. Supplements existing site records as needed based on discrepancies, alterations and impacts observed.
<b>Recreation Specialist</b>	Evaluates impacts of the proposed action on recreational activities. Prepares analyses of recreational facilities and activities. Identifies facilities and/or activities that have the potential for beneficial or adverse effects from wildfire as well as possible effects to the project. Documents these evaluations in a recreation assessment.
<b>Visual Resources Specialist</b>	Evaluates impacts of the proposed action on aesthetic concerns.
<b>Natural Hazards Specialist</b>	Evaluates impacts of the proposed action on natural hazards such as avalanches and wind events
<b>Field Program Coordinator</b>	Plans and coordinates the field work for all resources other than cultural. Supervises all environmental surveys for NEPA compliance using the condition-based planning approach.
<b>Bio-Physical Resources Field Crew</b>	Conducts surveys and field work in support of IDT.
<b>Public Information Specialist</b>	Prepares and distributes documents for public outreach. Facilitates public engagement, scoping, and comment periods in association with Inyo NF staff.
<b>Technical Writer &amp; Editor</b>	Assists the resource specialists and NEPA planners with writing and editing all the documents.
<b>Senior Spatial Analyst</b>	Advises the GIS specialist about complex spatial analyses and final products for the documents. Assists in developing the monitoring plan.
<b>GIS Specialist</b>	Performs basic spatial analyses and mapping for the resource specialists. Produces maps for the field crews. Creates maps and figures for the documents.

### **Fringe benefits**

All benefits are included in the billing rates in the salary & wages category

**General Operating Expenses**

The remainder of the expenses detailed below fall into the General Operating Expenses category, which will total \$121,412.

Travel

Travel will primarily consist of mileage from the Mammoth Lakes, CA, Whitebark Institute office to field sites. Mileage will be reimbursed at the state reimbursement rate (currently \$0.585/mile) and will total \$67,142.

Travel will also include attending and presenting at up to three conferences, for a total of \$19,270.

Materials and Supplies

Costs in this category will include the following:

- Field equipment (notebooks, clip boards, safety gear, pens, survey equipment, etc.): \$8,800
- Office supplies: \$8,000
- Printing: \$2,200

Computers and Computer Services

Costs for this category will be \$4,800 and will provide for software needed for the project (Microsoft Office, ArcGIS, etc.)

Training

This category will consist of training on being part of an interdisciplinary team and will include Inyo National Forest IDT members: \$11,200

**Indirect Costs**

Indirect costs will support the day-to-day operations of the Whitebark Institute and will cover costs such as office space, insurance, accounting software, and administrative personnel. Indirect costs are calculated at 10% of the direct costs, or \$190,991.20.

Attachment A  
**Holly Alpert, Ph.D.**

3577 Majestic Way  
Bishop, CA 93514  
760.709.2212  
holly@whitebarkinstitute.org

Education

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**University of California, Santa Cruz**

**Ph.D., Environmental Studies (2009)**

- Dissertation Title: Climate Change Implications for Conifer Distribution and Water Resources Management in the Eastern Sierra Nevada, California

**Wellesley College, Wellesley, MA**

**Bachelor of Arts, Environmental Science and American Studies (1997)**

- Graduated *cum laude*; activities included: theatre (directing, writing, technical work); Student Council to the Board of Trustees.
- Conducted tree demography research within campus' forest patches resulting in management recommendations for college's landscape and grounds department.
- Awarded Ethel L. Hersey Prize in American Studies for a play about women and AIDS.
- Inducted into Sigma Xi, the Scientific Research Society.

Employment

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**Regional Forest and Fire Capacity Program, Eastern Sierra, CA**

**January 2020 – present**

*Program Director*

- Lead group of stakeholders on wildfire preparedness and ecosystem health in Inyo, Mono, and Alpine Counties
- Coordinate all aspects of RFFCP, including project development, outreach, and grant writing

**Inyo-Mono Integrated Regional Water Management Program, Eastern Sierra, CA**

**August 2008 – present**

*Program Director (July 2016 – present)*

- Coordinate all activities of Inyo-Mono Regional Water Management Group
- Represent Inyo-Mono IRWM Program at local, regional, and state meetings and conferences
- Seek funding for high-priority projects
- Ensure compliance with state rules and regulations regarding IRWM
- Perform outreach and correspondence with local, regional, and state stakeholders and agencies, including tribes and disadvantaged communities
- Manage state grants

*Program Manager (February 2011 – July 2016)*

- Responsible for managing day-to-day operations of IRWM Program, including overseeing staff
- Worked with water system managers to secure funding and technical resources for priority projects
- Responsible for incorporating climate change information and planning into Inyo-Mono IRWM Plan
- Lead grant writing efforts for Proposition 84 Planning and Implementation grants, securing \$2.2 million in grant funding for the region
- Served as Project Manager for CA Proposition 84 Rounds 1 and 2 Planning Grant and



## Attachment A

### Holly Alpert, Ph.D.

- Disadvantaged Communities Grant; oversee all work of these grants
- Conducted public and targeted outreach meetings and served as primary point person for IRWM Program

*Project Assistant (August 2008 – February 2011)*

- Assisted in coordination and writing of Phase I Integrated Regional Water Management Plan for eastern Sierra region
- Served as point person for communication with 50+ stakeholders
- Organized monthly meetings for full stakeholder group and steering committee
- Prepared outreach materials and conduct outreach to new stakeholders

#### **California Rural Water Association, Sacramento, CA**

**June 2016 – present**

*Integrated Regional Water Management Program Coordinator*

- Conduct outreach to IRWM regions throughout CA
- Manage grants and oversee work for three disadvantaged community involvement projects in eastern CA and southern CA

#### **Devils Postpile National Monument, Mammoth Lakes, CA**

**August 2009 – September 2010**

*Ecologist; Biological Sciences Technician*

- Responsible for developing natural resources program, including research, data/information management, and collaboration with research partners
- Assisted with writing of first-ever General Management Plan and Resources Stewardship Strategy
- Assisted in coordination of cold-air pooling project to assess possible impacts of climate change on the Monument
- Supervised summer climate change intern

#### **University of California Santa Cruz, Santa Cruz, CA**

**January 2004 – December 2008**

*Graduate Student Researcher*

- Examined ecological impacts of seawater and brackish water desalination through a CA Proposition 50 grant to Professor Brent Haddad, which included working with partners from Stratus Consulting
- Examined impacts of snow depth change as a proxy for projected climatic changes on vegetation communities in eastern California

#### **Earthwatch Institute, Mammoth Lakes, CA**

**Summer 2004, 2005, 2006**

*Resident/Research Assistant*

- Assisted project leader Dr. Michael Loik in hosting groups of exceptional high school students to participate in research at study sites in eastern California

#### **Oregon Humane Society, Portland, OR**

**May 2001 – May 2002**

*Development Assistant*

- Managed 40,000+-donor database; recorded daily donations and coordinated tribute gift program; composed thank-you letters to donors; produced other correspondence as directed; served as a liaison between organization and donors

Attachment A  
**Holly Alpert, Ph.D.**

**Recreational Equipment, Inc., Tigard, OR, and Framingham, MA**

**June 1997 – May 2003**

*Positions held: Customer Service Specialist, Specialty Shop Manager, Specialty Shop Coordinator, Sales Specialist, Office Specialist*

Responsibilities included:

- Assisting customers in returns, ordering process, and other inquiries
- Meeting sales goals in Outdoorwear specialty shop; coordinating and delivering new training programs to staff; facilitating teamwork among all areas of the store; leading group meetings; coordinating day-to-day operations of the store
- Scheduling 15-30 staff on bi-weekly basis; writing and delivering performance reviews; interviewing, hiring, and training new employees; coordinating daily operations of one department
- Providing excellent customer service in the Bicycling, Paddling, Ski, Climbing, and Camping departments
- Assisting in Grand Opening of Framingham, Mass. location; implementing several office systems; banking and auditing of each day's sales

Teaching

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**University of California, Santa Cruz, Santa Cruz, CA**

**Teaching Assistant, 2004-2006**

Plant Physiological Ecology, Political Economy and the Environment, Ecology, and Physical and Chemical Environment

**Guest Lectures**

UC Davis: Environmental Science & Management 121 (Water Science and Management)

- December 2013: Inyo-Mono Integrated Regional Water Management Program

UC Santa Cruz: Environmental Studies 80B (Ecological Forecast for Global Warming)

- Fall 2004: Climate Change Impacts on Freshwater, Marine Systems, and Agriculture
- Fall 2005: Climate Change Impacts on Agriculture and Food Security

UC Santa Cruz: Environmental Studies 162 (Plant Physiological Ecology)

- Winter 2006: Seed and Seedling Ecology

Peer-Reviewed Publications

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- Dettinger, Michael, **Holly Alpert**, John Battles, Jonathan Kusel, Hugh Safford, Dorian Fougères, Clarke Knight, Lauren Miller, Sarah Sawyer. 2018. Sierra Nevada Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-004.
- Loik ME, Griffith AB, **Alpert H**, Concilio AL, Wade CE, Martinson SJ. 2015. Impact of intra- vs. inter-annual snow depth variation on water relations and photosynthesis for two Great Basin Desert shrubs. *Oecologia* 10.1007/s00442-015-3224-7
- Loik, Michael E., Alden B. Griffith, **Holly Alpert**. 2013. Impacts of long-term snow climate change on a high-elevation cold desert shrubland, California, USA. *Plant Ecology* 214(2): 255-266.
- **Alpert, H.**, M.E. Loik. 2013. *Pinus jeffreyi* establishment along a forest-shrub ecotone in eastern California, USA. *Journal of Arid Environments* 90: 12-21.
- Loik ME, **Alpert H**, Griffith AB. 2010. Climate change and snow depth impacts on vegetation at the Great Basin Desert-Sierra Nevada ecotone. Pages 135-155 in Dallmeier F, Fenech A, MacIver D, Szaro R, eds. Climate change, biodiversity, and sustainability in the Americas. Washington, D.C.: Smithsonian Institution Scholarly Press.
- Griffith, A.B., **H. Alpert**, M.E. Loik. 2009. Predicting shrub ecophysiology in the Great Basin Desert using spectral indices. *Journal of Arid Environments* 74(3): 315-326.

## Attachment A

### Holly Alpert, Ph.D.

- Patrick, Lisa, Jessica Cable, Daniel Potts, Danielle Ignace, Greg Barron-Gafford, Alden Griffith, **Holly Alpert**, Natasja Van Gestel, Traesha Robertson, Travis E. Huxman, John Zak, Michael E. Loik, David Tissue. 2007. Effects of an increase in summer precipitation on leaf, soil, and ecosystem fluxes of CO<sub>2</sub> and H<sub>2</sub>O in a sotol grassland in Big Bend National Park, Texas. *Oecologia* 151(4): 704-718.
- "Carbon Cycle" – a contributed article in *Encyclopedia of Environment and Society*, Sage Publications.

#### Service/Volunteer

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##### **Sierra Nevada Climate Change Vulnerability Assessment**

- July 2020 – present
- Led by Sierra Business Council

##### **Inyo County Animal Shelter**

- Cat kennel volunteer, January 2020 - present

##### **Amargosa Conservancy**

- Board of directors, 2013 - 2019
- President, 2015 - 2019
- Secretary, 2013-2015

##### **California 4<sup>th</sup> Climate Assessment**

- Sierra Nevada Region Report, 2018
- Focus: water resources impacts

##### **Humane Society Boulder Valley, Boulder, CO**

- Weekly volunteer cat kennel assistant, helping to socialize cats and ready them for adoption, 2015 - 2018

##### **California Department of Water Resources Climate Change Technical Advisory Group**

- 2012-2015; advised state water managers on issues related to climate change and local/regional water planning
- Co-author of report "Perspectives and Guidance for Climate Change Analysis"

##### **California Native Plant Society**

- Vice President and Program Chair, 2011-2014
- Served on Mary DeDecker grant program committee (Chair for one year)

##### **Sierra Classic Theatre**

- Board Member, 2007 – 2011
- Technical advisor; directing, acting, set building, lighting design
- Directed and coordinated annual murder mystery dinner fundraiser, 2007-2014

##### **Sierra Nevada Alliance Water and Climate Change Campaign Advisory Committee**

- 2009-2011

##### **Advisory Committee, Association of Monterey Bay Area Governments Proposition 50**

##### **Desalination Project**

- Quarterly Meetings, 2006-2007

##### **Expanding Your Horizons in Science and Math**

- UC Santa Cruz, March 2006
- Conference for 8<sup>th</sup> – 12<sup>th</sup> grade girls
- Presenter: Will Redwood Trees Survive Global Warming?

##### **Graduate Student Representative on Conservation Biologist Search Committee**

- Environmental Studies Department UC Santa Cruz, 2005-2006

**Richard Kattelmann**

Hydrologist  
143 Jeffrey Pine Road, Crowley Lake, CA 93546  
760 935 4088      rick@whitebarkinstitute.org

**Areas of Specialization:**

Snow and mountain hydrology, watershed management, wildfire risk mitigation

**EDUCATION**

Ph.D., Geography, 1995, University of California, Santa Barbara  
M.S., Forest Hydrology, 1981, University of California, Berkeley  
B.S., Forestry, 1979, University of California, Berkeley

**EMPLOYMENT**

Wildfire Risk Mitigation Specialist, RFFCP via ECWA & Whitebark, 2020-current

Hydrologist, California Trout via TSS Consultants, 2021-current

Wildfire Science Advisor, ESCCRP via Plumas Corporation, 2020-current

Hydrologist, Inyo-Mono Regional Water Mgmt Group via ECWA & CRWA, 2011-2022

Consulting Hydrologist, private practice, 2000-2010

Assistant Researcher, Bren School of Environmental Science & Mgmt, UCSB, 1995-2000

Visiting Instructor, Dept. of Earth Resources, Colorado State University, 1997

Consultant to Sierra Nevada Ecosystem Project, University of California, Davis, 1993-1996

Researcher and Research Assistant, University of California, Santa Barbara, 1985-1995

Hydrologist, Central Sierra Snow Lab, PSWFRES, USDA-Forest Service, 1980-1985

**PROFESSIONAL ACTIVITIES**

Certified Professional Hydrologist    American Institute of Hydrology    1988 to 2007

Author of more than 100 technical papers concerning hydrology & watershed management

**Richard Kattelmann**

**Selected Papers**

Kattelmann, R., 1982. Water yield improvement in the Sierra Nevada snow zone: 1912-1982. *Proceedings of the Western Snow Conference* 50:39-48.

Kattelmann, R., and N.H. Berg, 1983. Two approaches to estimating regional snow water equivalent. In: *Proceedings American Geophysical Union Hydrology Days*, Colorado State University Hydrowar Pub. CEP-83HJM16, pp. 87-103.

Kattelmann, R. B.J. McGurk, N.H. Berg, J.A. Bergman, J.A. Baldwin, and M.A. Hannaford, 1983. The isotope profiling snow gage: Twenty years of experience. *Proceedings of the Western Snow Conference* 51:1-8.

Kattelmann, R., N. H. Berg, and J. Rector, 1983. The potential for increasing streamflow from Sierra Nevada watersheds. *Water Resources Bulletin* 19:395-402

Kattelmann, R., 1984. Snowmelt lysimeters: Design and use. *Proceedings of the Western Snow Conference* 52:68-79.

Kattelmann, R., 1984. Wet slab instability. In: *Proceedings International Snow Science Workshop*, Aspen, CO, pp. 102-108.

Kattelmann, R., N.H. Berg, and M.K. Pack, 1985. Estimating regional snow water equivalent with a simple simulation model. *Water Resources Bulletin* 21:273-280.

Kattelmann, R., 1985. Macropores in snowpacks of the Sierra Nevada. *Annals of Glaciology* 6:272-273.

Kattelmann, R., 1985. Snow management at ski areas: Hydrologic effects. In: *Watershed Management in the Eighties*, American Society of Civil Engineers, New York, pp. 264-272.

Kattelmann, R. 1985. Temperature indices of snowmelt during rainfall. *Proceedings of the Western Snow Conference* 53:152-155.

McGurk, B.J. and R. Kattelmann, 1986. Water flow rates, porosity, and permeability in snowpacks of the central Sierra Nevada. In: *Proceedings Cold Regions Hydrology Symposium*, American Water Resources Association, Bethesda, pp. 369-376.

Kattelmann, R., 1986. Measurements of snow layer water retention. In: *Proceedings Cold Regions Hydrology Symposium*, American Water Resources Association, Bethesda, pp. 377-386.

Kattelmann, R. 1986. Snow compaction effects on nighttime freezing. *Proceedings of the Western Snow Conference* 54:168-171.

Kattelmann, R., 1987. Some measurements of water movement and storage in snow. In: *Avalanche Formation, Movement and Effects* (B. Salm and H. Gubler, Eds.), International Association of Hydrological Sciences Publication 162, pp. 245-254.

Kattelmann, R., 1987. Water release from a forested snowpack during rainfall. In: *Forest Hydrology and Watershed Management* (R.H. Swanson, P.Y. Bernier and P.D. Woodard, Eds.), International Association of Hydrological Sciences Publication 167, pp. 265-272.

Kattelmann, R. and N. Berg, 1987. Water yields from high elevation basins in California. In: *Proceedings*,

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*California Watershed Management Conference* (R. Z. Callaham and J. J. DeVries, Eds.) University of California Wildland Resources Center, Berkeley, Report No. 11: 79-85.

Kattelmann, R., 1987. Methods of estimating liquid water storage in snow. *Proceedings of the Western Snow Conference* 55:158-161.

Kattelmann, R., 1987. Uncertainty in assessing Himalayan water resources. *Mountain Research and Development* 7(3):279-286.

Kattelmann, R., 1988. Observations of oversnow flow in subalpine meadows of Colorado. In: *Management of Subalpine Forests: Building on 50 Years of Research*, General Technical Report RM-149, USDA-Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO, pp. 185-188.

McGurk, B., D. Azuma, and R. Kattelmann, 1988. Density of new snow in the central Sierra Nevada. *Proceedings of the Western Snow Conference* 56:158-161.

Kattelmann, R., 1988. Mountain hazards and hydroelectric development in the Nepal Himalaya. In: *Water for World Development*. International Water Resources Association, Urbana, IL, vol 1: 135-143.

Kattelmann, R., 1989. Seasonal hydrologic processes in an alpine catchment. In: *Proceedings American Geophysical Union Hydrology Days*, Colorado State University, Fort Collins, CO, pp. 107-118.

McGurk, B. and R. Kattelmann, 1989. Thick section photography of snowpack flow features. In: *Proceedings International Snow Science Workshop*, Whistler Village, British Columbia, pp. 137-139.

Kattelmann, R., K. Elder, and J. Dozier, 1989. Monitoring basin-wide snowmelt with ablation stakes. In: *Proceedings International Snow Science Workshop*, Whistler Village, British Columbia, pp. 259-261.

Kattelmann, R., 1989. Hydrology of four headwater basins in the Sierra Nevada. In: *Proceedings of the Headwaters Hydrology Symposium*, American Water Resources Association, Bethesda, MD, pp. 141-147.

Kattelmann, R., 1989. Groundwater contributions in an alpine basin in the Sierra Nevada. In: *Proceedings of the Headwaters Hydrology Symposium*, American Water Resources Association, Bethesda, MD, pp. 361-369.

Kattelmann, R., 1989. Spatial variability of snowpack outflow at a Sierra Nevada site. *Annals of Glaciology* 13:124-128.

Kattelmann, R. and B. McGurk, 1989. Snowpack changes and water release at a low elevation site in the Sierra Nevada. *Proceedings of the Western Snow Conference* 57:141-144.

Kattelmann, R., 1990. Exporting Himalayan floods. In: *International and Transboundary Water Resources Issues* (J. E. Fitzgibbon, Ed.), American Water Resources Association, Bethesda, MD, pp. 101-110.

Kattelmann, R. 1990. Effects of forest cover on a snowpack in the Sierra Nevada. In: *Watershed Planning and Analysis in Action* (R.E. Riggins, E.B. Jones, R. Singh, and P.A. Rechar, Eds.), American Society of Civil Engineers, New York, pp. 276-284.

Elder, K., R. Kattelmann, and R. Ferguson, 1990. Refinements in dilution gaging for mountain streams. In: *Hydrology in Mountainous Regions. I - Hydrological Measurements; the Water Cycle* (H. Lang and A. Musy, Eds.), International Association of Hydrological Sciences Publication 193: 247-254.

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Williams, M., R. Kattelmann, and J. Melack, 1990. Groundwater contributions to the hydrochemistry of an alpine basin. In: *Hydrology in Mountainous Regions. I - Hydrological Measurements; the Water Cycle* (H. Lang and A. Musy, Eds.), International Association of Hydrological Sciences Publication 193: 741-748.

Kattelmann, R., 1990. Hydrology and development of the Arun River, Nepal. In: *Hydrology in Mountainous Regions. I - Hydrological Measurements; the Water Cycle* (H. Lang and A. Musy Eds.), International Association of Hydrological Sciences Publication 193: 777-784.

Kattelmann, R., 1990. Floods in the high Sierra Nevada, California, USA. In: *Hydrology in Mountainous Regions. II - Artificial Reservoirs; Water and Slopes*, (R. O. Sinniger and M. Monbaron, Eds.), International Association of Hydrological Sciences Publication 194: 311-318.

Kattelmann, R., 1990. Snow hydrology of an alpine basin. *Proceedings of the Western Snow Conference* 58:41-50.

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## Attachment A

Simone Mata  
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simone@whitebarkinstitute.org (760)920-4604

### **EDUCATION**

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- **University of Utah**, *Doctor of Physical Therapy*, May 2016
- **California Polytechnic State University**, *BS Kinesiology*, June 2012

### **EXPERIENCE**

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#### **Whitebark Institute of Interdisciplinary Environmental Sciences**

- Administrator* January 2022 - Present
- Accounting, bookkeeping and general office management for multi-funding source environmental non-profit

#### **Northern Inyo Healthcare District** April – August 2021

- Director of Rehabilitation Services*
- Departmental management of clinical and non-clinical staff including 3 separate practice disciplines at non-profit Critical Access Hospital

#### **Northern Inyo Healthcare District** August 2018 – April 2021

- Physical Therapist*
- Clinical care for outpatient adult, geriatric, sports, pediatric, school-based pediatric and inpatient practice at non-profit Critical Access Hospital

#### **University of Utah Orthopedic Center** May 2016 – July 2018

- Physical Therapist*
- Clinical care for outpatient orthopedic clinic at University-based facility

### **ADDITIONAL PHYSICAL THERAPY EXPERIENCE**

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#### **DeRosa Physical Therapy Clinic** March -May 2016

- Student Physical Therapist*
- Evaluation, treatment and development of plan of care for daily caseload of 12 individuals/day under supervision of Clinical Instructor in outpatient private practice.

#### **Granite School District** January – March 2016

- Student Physical Therapist*
- Individualized Education Plan management and practice for school-based pediatric practice.

#### **Northern Inyo Healthcare District** May – August 2015

- Student Physical Therapist*
- Evaluation, treatment and development of plan of care for daily caseload of 8 individuals/day under supervision of clinical instructor in rural Critical Access Hospital

#### **Student-Run Pro Bono Clinic, Midvale CBC Clinic** January 2014-Dec 2015

- Volunteer Student Physical Therapist*
- Evaluation, treatment and patient education of 3-4 patients/day for under-resourced Latinx communities

**Student Run Pro Bono Clinic, Maliheh Free Clinic**

January - May 2015

*Volunteer Student Physical Therapist*

- Evaluation, treatment and patient education of 3-4 patients/day for under-resourced Latinx communities

**TEACHING AND RESEARCH EXPERIENCE**

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**Northern Inyo Healthcare District, *Clinical Instructor***

- Taught 3, second-year student physical therapists for their orthopedic rotations

**University of Utah Orthopedic Center, *Clinical Instructor***

- Taught 3 third-year student physical therapists for their orthopedic rotations

**University of Utah PT Program, *Laboratory Teaching Assistant***

- Instruction of Advanced Interventions course lab session for third year class

**Student Run Pro Bono Clinic, Midvale CBC Clinic, *Research and Outcomes Liaison***

- Outcome collection, reporting and analysis of clinical and community-engaged learning outcomes.

**U of U PT Program, *Laboratory Teaching Assistant***

- Instruction of Teaching and Learning course lab session for first year class

**CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT**

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- Crucial Factors Influencing Health & Recovery in Musculoskeletal Care, 2021
- Ethics for Rehabilitation Professionals, 2020
- APTA Combined Sections Meeting, 2020
- Balance Training and Fall Prevention for the Active Geriatric Population, 2018
- Cervico-Thoracic Spine Management 2018
- Balance Domains Part 3: Dynamic Stability & Biomechanical Issues, 2018
- Balance Domains Part 2: Sensory Organization & Dual Task Cost, 2018
- Balance Domains Part 1: Anticipatory, Reactive, & Limits of Stability, 2018
- Mulligan Concept Spine Management, 2019
- Functional Dry Needling Level I certification, 2018
- Functional Movement and Return to Sport Screening, 2017
- APTA Combined Sections Meeting 2016
- Mechanical Diagnosis and Therapy Spine Management, 2015

**PROFESSIONAL ORGANIZATIONS**

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American Physical Therapy Association, 2016-Present

Journal of Orthopedic Sports Physical Therapy, 2016-Present



## TANIA TREIS, PRINCIPAL

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### Overview of Experience and Expertise



**Tania Treis** is a Principal and the founder and owner of Panorama. She has served as the Project Manager for all of Panorama's fuel reduction projects. Tania has over 20 years of experience in environmental planning and management, with extensive CEQA and NEPA experience and knowledge.

Tania brings a broad and valuable skill set. She understands computational methodologies and modeling through her educational background, which focused heavily on applied mathematics, being awarded master's degrees in both biology (population biology) and geology (geomorphology). Tania also has a close working relationship with the forest ecologists on several projects, including from Spatial Informatics Group and is well versed in the wildfire-risk assessment quantitative and qualitative processes and how to use landscape-scale data for technical analyses. Mostly, Tania brings a collaborative approach and an ability to bring together numerous different experts, specialists, regulators, and interested parties to motivate them to achieve a common goal. She can work well with different personalities. Tania has a deep understanding, based in practice and experience, of all the technical components of a NEPA and CEQA analysis and, therefore, plays an integral role when developing studies and mitigation. Her role includes asking critical questions to technical experts to ensure a sound approach, facilitating the generation of solutions to issues that arise through brainstorming of ideas across multiple team members, and assisting team members that may need help to complete their analyses and meet their timelines.

Tania also understands and highly values the importance of clear and concise writing in her own practice and instills this importance with all her staff. Technical review and editing for quality are extremely important to her. She is also highly skilled at managing the scope, schedule, and budget for projects. Tania is very familiar with the Eastern Sierra, having worked on many of Panorama's projects in Inyo County since 2002, including the Hay Ranch project, Dehy Park, Sabrina Bridge Replacement, Tecopa Sewage Lagoon, among many others. She understands very well the cultural and biological resources of the region.

## EDUCATION

- M.S., Geology, San Jose State University
- M.A., Biology, University of Pennsylvania
- B.A., Mathematical Biology, University of Pennsylvania

## SPECIALIZED TRAINING

- Wetland Delineation Training Program. 38-Hour, fulfilling U.S. Army Corps of Engineers Wetland Delineation Training Requirements
- Geographic Information Systems Analyst Certificate Program, Foothill College

## Key Projects

### Fire and Fuels Management

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**Client:** Midpeninsula Regional Open Space District

**Project:** Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA)

**Role:** Project Manager

The Midpeninsula Regional Open Space District is creating the Wildland Fire Resiliency Program to address wildfire risk in the District's over 60,000 acres of open space preserves. Tania is helping define the non-fire fuels management plan, a prescribed fire plan, wildland fire pre-plan/resource advisor maps, and a monitoring plan. Tania wrote the extensive monitoring plan for the project, which includes the method and parameters for measuring success of treatments. As project manager, Tania was responsible for development of the plan, public outreach, and preparation of all CEQA documentation.

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**Client:** San Lorenzo Valley Water District

**Project:** Fire Management Plan (Santa Cruz County, CA)

**Role:** Project Director

As Project Director, Tania oversaw the preparation of a Wildland Fire Management Plan for San Lorenzo Valley Water District (SLVWD). The team defined the immediate actions to protect existing assess in the recent fire season. Tania provided QA/QC of the plan and participated in the coordination with regional partners including CALFIRE, Santa Cruz County, City of Santa Cruz, the San Mateo and Santa Cruz RCDs and others. Tania is also providing strategic support to assist the district in determining appropriate CEQA and permitting routes for the work, including CALVTP EIR and exemptions, as well as coverage under other CALFIRE programmatic documents (e.g., for the CFIP program).

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**Client:** Stanford University

**Project:** Vegetation Management Plan (Santa Clara and San Mateo Counties, CA)

**Role:** Project Manager

Panorama was hired to conduct outreach and a policy review and analysis to ultimately prepare an update to Stanford's previous vegetation management plan. Tania was the Project Manager for this effort and oversaw wildfire risk modeling and preparation of a detailed regulatory review and outreach report, including identification of when CEQA review and NEPA review



may be needed (e.g., for updates to an HCP). Tania prepared an outreach plan and lead jurisdictional outreach that included six jurisdictions and the fire, emergency, general management, planning, and public works staff from each of these agencies, in addition to CALFIRE.

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**Client:** Stanford University

**Project:** Portola Valley Cluster Subdivision Fire Plan (San Mateo County, CA)

**Role:** Project Manager

Stanford University is proposing to create faculty housing in the Town of Portola Valley. Due to wildfire risks in the project area, the Town of Portola Valley and Woodside Fire Protection District requested Stanford University to conduct fire behavior modeling and prepare a vegetation management plan for the project. Tania led a team of specialists from Spatial Informatics Group and Prometheus Fire Consulting to conduct fire behavior and hazard modeling. Tania also managed the preparation of a Vegetation Management Plan that identifies treatments to meet Woodside Fire Protection District's and legal requirements to reduce the potential for high severity fire.

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**Client:** UC San Francisco

**Project:** Mount Sutro Open Space Reserve Vegetation Management Plan (San Francisco County, CA)

**Role:** Project Manager

UCSF initiated the process to develop a vegetation management plan for their 61-acre Mount Sutro Reserve since 2002. As project manager, Tania led the CEQA process for the project and oversaw the work off all technical experts including on issues pertaining to fire hazards, changes in slope stability and erosion, visual changes, changes to a historic landscape, and a detailed analysis of carbon sequestration from changes in tree cover in the forest. Tania worked closely with the RPF on the project to revise vegetation management prescriptions to address environmental concerns.

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**Client:** Marin Wildfire Prevention Authority

**Project:** On-Call Contract (Marin County, CA)

**Role:** Contract Manager

Tania is the contract manager for Panorama's work for the Marin Wildfire Prevention Authority. Tania oversees Panorama's work developing and providing the environmental review, community outreach, and implementation of numerous fire mitigation projects across Marin County. Her work has included defining the program, coordinating with multiple entities, providing support for public outreach, reviewing fuel prescriptions, and addressing Local Coastal Program issues and permitting related to fuel management along the coast. Panorama's team is coordinating and permitting over 25 projects for this year's work plan, which includes CEQA and NEPA compliance.

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**Client:** Marin Municipal Water District

**Project:** Biodiversity, Fire, and Fuels Integrated Plan (Marin County, CA)

**Role:** Project Manager

As project manager, Tania managed the preparation of the BFFIP and worked closely with Marin Municipal Water District to ensure that the BFFIP adequately addressed public concerns, that it is concise and clear, and that it facilitates the environmental analysis for the CEQA

document. Tania also led the preparation of the Program EIR. She led the technical team and reviewed all technical analyses to produce the Draft EIR and authored the water quality and geology sections.

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**Client:** Alpine County

**Project:** Wildfire Hazard Risk Mitigation Plan and IS/MND (Alpine County, CA)

**Role:** Project Director

The Alpine County Wildfire Hazard Risk Mitigation Plan involved an assessment of hazardous fuels and the risk they cause to communities and public infrastructure. Tania prepared the Wildfire Hazard Risk Mitigation Plan document utilizing the technical analyses and risk modeling prepared by our team members from SIG and provided the oversight and QA/QC for the IS/MND that covered the program and three shovel-ready projects. She also participated in all public outreach efforts. The project also required working with the USFS, Regions 4 and 5, who were on the Technical Advisory Committee for the project, since the project included an assessment of all lands in the County, including on USFS lands.

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**Client:** San Mateo County Resource Conservation District

**Project:** Wildfire Hazard Risk Mitigation Plan and IS/MND (Alpine County, CA)

**Role:** Principal

Tania is providing Principal-level oversight and review for this project, which includes a modeling analysis and definition of various options and activities to reduce wildfire risks along the coast side region around El Granada. The project involves outreach and input workshops from key community groups and organizations as well as synthesizing results into a menu of options to reduce risks. Tania is providing high level strategy and QA/QC support.

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### Eastern Sierra CEQA and NEPA Experience

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**Client:** Mono County

**Project:** Walker Basin Conservancy Water Transfer Program and General Plan Amendment

**Role:** Project Director

Mono County (County) is investigating development of a possible voluntary water transaction program that would facilitate the leasing or sale of water rights to support the restoration of Walker Lake in Nevada, as part of the Walker Basin Restoration Program. Tania oversaw the team's development of the water transfer program, preparing the General Plan Amendment, and overseeing the preparation of the Focused EIR. Impacts addressed were primarily to biological resources from changes in habitat from the loss of water runoff from irrigated areas. Tania also planned and attended a series of public meetings to present the program and receive input from key stakeholder and the public.

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**Client:** Inyo County Planning Department

**Project:** Hay Ranch Groundwater Transfer Project and Pipeline (Inyo County, CA)

**Role:** Project Manager

Tania led the preparation of an EIR for a groundwater pumping project that involved construction of a 9-mile pipeline across land managed by the BLM and U.S. Navy, a pumping station, an electrical substation, and two large water storage tanks. The Coso Operating Company, LLC sought a 30-year Conditional Use Permit from the Inyo County Planning

Commission to extract groundwater from two existing wells and deliver the water to the injection distribution system at the Coso geothermal field in the northwest area of the China Lake Naval Air Weapons Station. The project was highly controversial due to the potential to cause off-site impacts to Little Lake Ranch, which includes a wetland habitat restoration project located downstream of the Hay Ranch property. Tania oversaw specialists who performed a long-term groundwater pumping test and groundwater drawdown modeling for the project. Panorama also performed reconnaissance biological surveys along the pipeline route. Other major issues that Tania worked through in the EIR included impacts on the Coso Hot Springs, a Native American site listed on the National Register of Historic Places, and impacts on special-status species along the project route (desert tortoise and Mohave ground squirrel). Tania also led public meetings for the Draft EIR, the Final EIR, and an appeal hearing for the project. Over 100 interested parties attended the Final EIR hearing. The EIR materials were used by BLM to prepare an EA for the project.

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**Client:** Coso Energy

**Project:** Coso Geothermal Relicensing Categorical Exemption (Inyo County, CA)

**Role:** Project Director

Coso Energy operates the U.S. Bureau of Land Management (BLM) East and West geothermal power plants located on the China Lake Naval Air Weapons Station (NAWS) on a federal BLM lease. Tania provided general oversight for the environmental review for the relicensing of the Coso BLM East and West Power Plant, including gathering background data, consultation with the US Navy, BLM, Inyo County, Lahontan Regional Water Quality Control Board, and Great Basin Unified Air Pollution Control District and provided QA/QC for the documentation to support a CE under NEPA for the project.

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**Client:** Inyo County Public Works

**Project:** Sabrina Road over Middle Fork Bishop Creek Bridge Replacement Project (Inyo County, CA)

**Role:** Project Manager

The project involved a bridge replacement within the Inyo National Forest, near Lake Sabrina (at elevation 9,200 feet). The project is in the Inyo National Forest and required changes in easements with the Forest Service. Panorama coordinated with the USFS to understand and ensure that the NEPA documentation prepared for the project addressed the Forest Service's requirements and concerns. The project included preparation of a CEQA document and several studies including a Natural Environment Study, Wetland Study, Location Hydraulic Study, 4(f) Evaluation, an Initial Site Assessment, a Visual Resources Assessment, and a Water Quality Study in support of the NEPA determination. The project also involved acquisition of 401, 404, and 1600 permits. Tania led a team of specialists and worked with Inyo County and the project engineer to define the project.

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**Client:** Inyo County Public Works Department

**Project:** Inyo County Road Re-openings (Inyo County, California)

**Role:** Project Director

The project included the environmental studies and documentation necessary to receive federal aid administered through Caltrans for repairs to storm-damaged roads in Inyo County. Ten different road segments were damaged, requiring ten separate Preliminary Environmental

Study (PES) forms. Tania provided quality control and directed the Project Manager on completion of deliverables and project strategy. Many environmental studies were required including Archeological Survey Reports, Natural Environment Studies, and Visual Technical Memorandums. Tania also oversaw the permitting process with CDFW.

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**Client:** Inyo County Public Works Department  
**Project:** Laws Railroad Restoration Project (Inyo County, California)  
**Role:** Project Manager

The project included restoration and reconstruction of a historic railroad and installation of an historic bridge northeast of the City of Bishop. The project lies within a known sensitive, but previously uncharacterized, environment. The environmental review was implemented by Inyo County Public Works Department but was partially funded by a Transportation Enhancement Act grant. Tania led the team in preparing a joint IS/EA and oversaw a team of specialists conducting studies including for listed avian species, other wildlife and botanical species and prepared a Natural Environment Study and a Biological Assessment, a geologic hazards study, visual impact study, extensive wetland delineation study, and cultural resources studies.

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**Client:** Inyo County Public Works Department  
**Project:** Dehy Park Project (Inyo County, California)  
**Role:** Project Manager and Project Director on second phase

Tania led Panorama's work with Inyo County and Caltrans on the Dehy Park Improvement Project. The park is located on land leased from the City of Los Angeles, Department of Water and Power (LADWP). The park improvements were to be implemented in two phases to correspond with the funding provided by two grants. Tania led the preparation of an IS/MND under CEQA for the park improvement project. The Panorama team also prepared Caltrans studies to support a CE with Studies for the Federal Highway Administration portion of the project. Tania led specialists in the preparation of a Floodplain Study, a Traffic Study, and a Natural Environment Study. Extensive archaeological work was required for the proposed project, including the discovery of human remains and a Native American burial during cultural survey work. Tania led the outreach to the tribe to address the treatment of the remains through an MOU with the ACHP and the Tribe.

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**Client:** Inyo County Public Works Department  
**Project:** Tecopa Sewage Lagoon (Inyo County, California)  
**Role:** Project Manager

Tania led the Panorama team in our work with Inyo County Department of Public Works and the Barstow field office of the BLM to prepare CEQA and NEPA documents for repairs to a sewage pond in Tecopa, California. The sewage pond was built without a liner and had been experiencing seepage that needed to be repaired. The percolation and the seepage from the pond had established habitat for the Amargosa vole, a federal and state endangered species thought to be extinct until it was found in Tecopa. The BLM has identified an Area of Critical Environmental Concern (ACEC) for the vole and the USFWS has prepared a species recovery plan. Panorama has contacted all agencies involved (USFWS, BLM, California Department of Fish and Game, and the Lahontan Regional Water Quality Control Board) to discuss possible project modifications that could control the seepage but also minimize impacts to the vole.

Tania performed a detailed quantification and analysis of water flow from the ponds to determine the amount and design of the augmentation flow and obtained the Section 401 and 404 permits for the project.

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**Client:** Inyo County Public Works Department  
**Project:** Walker Creek Road Bridge Replacement (Inyo County, California)  
**Role:** Project Director

The project involved construction of a new free-span bridge over the Los Angeles Department of Water and Power (LADWP) Los Angeles Aqueduct and realigning Walker Creek Road to the new bridge. Inyo County was the CEQA lead agency. Caltrans (on behalf of FHWA) was the NEPA lead agency. Tania oversaw the preparation of the IS/MND under CEQA and technical studies to support Caltrans' preparation of a NEPA document as well as the preparation of the application for Incidental Take Coverage for listed species.

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**Client:** Inyo County Public Works Department  
**Project:** Carroll Creek Bridge Replacement (Inyo County, California)  
**Role:** Project Director

The project involved construction of a new free-span bridge over the Los Angeles Aqueduct and realigning Carroll Creek Road to the new bridge. The project crosses BLM and LADWP land and is funded by FHWA. Inyo County was the CEQA lead agency. Caltrans (on behalf of FHWA) was the NEPA lead agency. Tania oversaw the coordination with County and engineering consultant staff to prepare the IS/MND under CEQA and six technical studies to support Caltrans' preparation of a NEPA document, and coordination to address listed species and permitting.

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**Client:** Inyo County Public Works Department  
**Project:** Sunland Drive Culvert Replacement (Inyo County, California)  
**Role:** Project Director

Tania oversaw this project, which included providing the permitting for the extension of culverts along Sunland Drive and obtaining 401, 404, and Section 1600 permits for the project.

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**Client:** Inyo County Public Works Department  
**Project:** Riverside Road Bridge Replacement Project (Inyo County, California)  
**Role:** Project Manager

The project included the replacement of Inyo County Bridge #48C-29, located on Riverside Road in Inyo County, approximately 2 miles northwest of the intersection of US 395 and US 6 near Bishop. The project also included widening of the canal under the bridge. Tania led the preparation of the technical studies to support a NEPA CE and a Categorical Exemption under CEQA. She prepared the jurisdictional delineation and obtained Section 401, 404, and 1600 permits, as well as oversaw restoration after construction was complete

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**Client:** Inyo County Public Works Department  
**Project:** Shabbell Lane Road and Culvert Improvements (Inyo County, California)  
**Role:** Project Manager

The County of Inyo Department of Public Works proposed to conduct the Schabbell Lane Improvement Project, which involved repaving a portion of Schabbell Lane and replacing 14

culverts along the roadway. Schabbell Lane is a two-lane arterial road that traverses the Fort Independence Reservation, north of Independence, California. Tania defined and managed the completion of various technical studies and prepared an IS/MND for the project. Tania also oversaw the pre-construction biological fieldwork, construction monitoring, including of a stream diversion to facilitate the work, and prepared permit applications and restoration plans for the project. She also gave a crew training prior to work.

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**Client:** Inyo County Public Works Department

**Project:** Coso Road and Tuttle Creek Road Projects (Inyo County, California)

**Role:** Project Manager

These two projects included proposed improvements by Inyo County Public Works to Coso Road (from the intersection of Highway 395 to the Coso Geothermal Plant) and Tuttle Creek Road (Whitney Portal Road through the Alabama Hills to Thundercloud Lane). Tania led the team of specialists who conducted the biological and cultural resources surveys to support the planning process. She helped define the scope of work and provided QA/QC of the deliverables.

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**Client:** Inyo County Public Works Department

**Project:** See Vee Lane Project (Inyo County, California)

**Role:** Project Director

Panorama provided environmental support for this project that included extending See Vee Lane north from Highway 395 along the eastern boundary of Highlands Mobile Home Park in Inyo County, California. Tania, as PM worked with Eastern Sierra Engineering on the planning phase of the project, including oversight of the preparation of the cultural resources survey report, the biological resources survey report, a wetland delineation and organization of a public meeting. Tania also prepared the scope for future steps including additional focused wildlife surveys, CEQA review, and the permitting, including Section 404 permitting.

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**Client:** Inyo County Public Works Department

**Project:** Ed Powers Bike Lane (Inyo County, California)

**Role:** Project Director

The project included widening the pavement on an existing road and adding the necessary striping to add a bike lane to Ed Powers Road just outside Bishop, California. Tania oversaw the specialists who prepared the cultural resources survey to document resources in the APE and reviewed the Archeological Survey Report and Historic Property Survey Report for Caltrans to led the preparation of a NEPA CE and a Categorical Exemption under CEQA. Tania also oversaw the field visit to document drainages near the project area for permitting and supported Native American consultation.

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**Client:** Inyo County Public Works Department

**Project:** Trona Wildrose Road Repairs (Inyo County, California)

**Role:** Project Director

he Upper Trona Wildrose Road Scour Repair Project involved repairing approximately 2 miles roadway in the remote Panamint Valley. The project utilized California OES funding and, therefore, was required to adhere to strict design regulations. The project was exempt from CEQA; however, permit notification packages and federal approvals were required. Tania

attended a site visit with the County, engineers, and Caltrans and helped the PM with the consultation with federal landowners (BLM and NPS) and permitting agencies (CDFW and Regional Water Quality Control Board) to prepare an environmental package that could be used by all parties to approve and permit the project. Tania oversaw and provided QA/QC for comprehensive environmental package that detailed potential impacts to environmental resources. Panorama identified avoidance measures that would be implemented during project construction to ensure that environmental impacts did not occur.

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**Client:** City of Bishop

**Project:** Grove Street Safe Routes to School Project (Inyo County, California)

**Role:** Project Manager

The City of Bishop proposed to upgrade curbs, gutters, sidewalks, and water and sewer infrastructure along Grove Street and Hammond Street in Bishop, California. The purpose of and need for the proposed project was to address safety issues for students walking and biking to and from school along Grove Street and to improve utility infrastructure. Tania coordinated with the engineering team to define the project and prepared the IS/MND for the project.

### Other NEPA and USFS Experience

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**Client:** Calpine Corporation

**Project:** Glass Mountain Geophysical Surveys EA/FONSI (Modoc, Siskiyou, and Shasta Counties, California)

**Role:** Project Manager

Tania led the preparation of an EA to perform geophysical investigations for geothermal development on geothermal leases within the Modoc National Forest, the Shasta Trinity National Forest, and the Klamath National Forest. Panorama coordinated with Forest Service staff to ensure that the work complied with the Forest Plans, sensitive species requirements, and the Medicine Lake Highlands Historic Properties Management Plan. Key issues included addressing the traditional cultural properties associated with the Medicine Lake Highlands, which are a National Register historic property.

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**Client:** Calpine Corporation

**Project:** Fourmile Hill Area Exploration Project/Glass Mountain Geothermal Project EIS/EIR (Siskiyou County, CA)

**Role:** Environmental Scientist/Planner

Tania created and prepared a mitigation monitoring reporting and tracking table for geothermal exploration activities on behalf of Siskiyou County Air Pollution Control District based on the EIS that was prepared by MHA Environmental Consulting, Inc. (a predecessor company to Panorama). Tania reviewed all of the mitigation measures and permit conditions and then separated them into phases and reportable components. She created a monitoring and reporting program that was simple and effective. The tables were designed to facilitate thorough tracking of all mitigation measures as well as other regulatory conditions (i.e. permits) for the project. Ms. Treis coordinated mitigation measure tracking verification.

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**Client:** Arevia Power and Southern Nevada District Office of the BLM

**Project:** Gemini 690 MW Solar Plus Battery Project EIS (Clark County, NV)

**Role:** Project Manager

Tania managed the entire NEPA process, from preparation of 26 technical support studies, the

project engineering, and preparation of the EIS for the BLM, and is current the Project Director for Panorama's role as the Environmental Compliance Management team. This highly controversial project included an EIS completed in 16 months, with the Record of Decision signed by Secretary of Interior David Bernhardt in 2020. Tania worked with numerous stakeholders and agencies and the BLM to devise unique mitigation that allowed desert tortoise to return to the solar field after construction in order to reduce effects to the federally endangered species. Other major issues included addressing a segment of the Old Spanish National Historic Trail that traversed through the site.

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**Client:** Pattern Energy  
**Project:** Viento Verde Wind Farm EIS (Santa Isabel, Puerto Rico)  
**Role:** Sr. Scientist/Planner

Tania collaborated with the team engineers to develop the project description and alternatives for the preparation of a NEPA EIS for a windfarm near Santa Isabel, Puerto Rico. Tania provided QA/QC for project deliverables and coordinated with contractors in Puerto Rico to prepare the EIS and English translation. Tania reviewed the Biological Resources analysis, visual resources analysis, and the geology and soils analysis.

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**Client:** California Public Utilities Commission  
**Project:** Channel Islands Telecommunications Project IS/EA (Channel Islands, CA)  
**Role:** Quality Control/Quality Assurance

The project included an Initial Study/EA for construction of several new telecommunication facilities on the Channel Islands, which is managed by the NPS. Tania provided guidance to the Project Manager on structuring the document to meet requirements of CEQA and NEPA. Tania provided the senior-level quality control review at several points in the project and technical review of the joint CEQA/NEPA document for the project. She also provided a thorough review and revisions to the biological resources section of the document. Tania reviewed and edited all project mitigation measures for practicality and feasibility of implementation.

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**Client:** Calpine-Geysers  
**Project:** Calpine Enhanced Geothermal Systems (EGS) Project EA (Middleton, California)  
**Role:** Project Manager

Managed the preparation of an EA for Calpine's proposed EGS project in the Geysers. The EA was prepared for the DOE. The EA included an extensive report on induced seismicity. Ms. Treis also reviewed and coordinated the Section 106 compliance, devised mitigation, and coordinated with the agencies.

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**Client:** Gradient Resources, Inc.  
**Project:** Patua Geothermal Project Phases I and II EAs (Churchill and Lyon Counties, NV)  
**Role:** Project Manager

Tania managed the preparation of two EAs under NEPA. In addition to two geothermal plants, the EAs considered the potential impacts of constructing transmission lines and geothermal pipelines. The project was located on federal and private land, with a portion of transmission located in the Fernley Wildlife Management Area. Tania reviewed all sections of the EAs and oversaw coordination with involved agencies, including the Bureau of Land Management, Bureau of Reclamation, and Nevada Department of Wildlife.



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**Client:** Ormat Inc.  
**Project:** Carson Lake Geothermal Development EA and FONSI (Fallon, NV)  
**Role:** Project Manager

Tania led the preparation of an EA for an 11 well pad geothermal exploration program at the Naval Air Station Fallon. She prepared the Plan of Exploration, coordinating with various agencies including the Bureau of Reclamation and BLM. She managed the archaeological and biological studies to prepare the EA. She also prepared the Plan of Operation for development of a 40 MW geothermal power plant.

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**Client:** Anderson Engineering  
**Project:** Town of Lakeview Geothermal Project EA and FONSI (Lakeview, OR)  
**Role:** Project Manager

Tania led the preparation of an EA for the DOE for a direct use and small power generation project in the Town of Lakeview, Lake County, Oregon. The project included complex issues surrounding impacts to wetlands and hot springs. She oversaw a consulting hydrologist who prepared and present an analysis of groundwater impacts to surface wetlands, to a geyser, and to nearby wells. Other issues included the presence of significant archeological resources that required data recovery, consultation with the tribes over a human burial, and various species impacts. The DOE lost funding for the project but it was subsequently funded by a grant from the Department of Agriculture. Tania, in coordination with the DOA, adapted the EA to meet the DOA's requirements. Construction required archaeological and tribal monitoring.

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**Client:** In Search of Truth (ISOT) Community  
**Project:** Canby Geothermal EA and FONSI (Canby, California)  
**Role:** Env Scientist/Project Manager

Tania coordinated with the client and federal agencies, and conducted research to author a biological analysis for an EA and accompanying Biological Assessment, including the development of mitigation measures for biologic and hydrologic issues. Tania developed a method of estimating mercury bioaccumulation in the existing river system in order to prepare an analysis of potential project effects on bald eagles. Tania was responsible for response to comments on the draft document. Tania also managed the initial preparation of an EA for the DOE for a second phase of the project that involved the development of another well and geothermal power plant.

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**Client:** Oregon Institute of Technology  
**Project:** OIT Geothermal Well and Power Plant Project EA and FONSI (Klamath Falls, OR)  
**Role:** Project Manager

Tania led the preparation of an EA for the DOE for the construction of a deep geothermal well and 1.2 MW power plant on the Oregon Institute of Technology Campus, in Klamath Falls, Oregon.

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**Client:** California Geothermal Energy Collaborative  
**Project:** Geothermal Outreach Principles Guidebook  
**Role:** Project Manager

Tania authored the industry leading guidebook on public outreach principles for the permitting of geothermal projects. The report included identification of principles, methods of outreach, and outreach tools and examples for developers for geothermal development.

## CAITLIN GILLERAN, SENIOR PROJECT MANAGER/ENVIRONMENTAL PLANNER

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### Overview of Experience and Expertise



Caitlin has 12 years of environmental planning, project management, and technical analysis experience. Caitlin leads projects through the CEQA and NEPA process with technical expertise in addition to a keen understanding of environmental regulations and resources. She has prepared or managed numerous environmental documents and supporting technical reports, ranging from small addendums to large programmatic EIRs and EISs. Caitlin has managed several projects, particularly vegetation and fuel management projects and programs, that involved review of the designs for environmental constraints, refinement of project details, coordination of multiple technical studies and deliverables, preparation of the CEQA and NEPA documents, direct coordination with the client and agencies, and performance of all administrative tasks associated with managing the schedule and budget. Caitlin is especially effective at coordination with and assisting a client to define the technical project elements required for a robust environmental analysis. She has managed project deliverables and technical subconsultants to meet tight deadlines and budgets.

#### EDUCATION

- B.S., Environmental Management and Protection, Emphasis in Science and City and Regional Planning, California Polytechnic State University San Luis Obispo

#### SPECIALIZED TRAINING

- CalEEMod 2020.4.0
- AERMOD Training Course
- Annual Advanced CEQA Workshops
- CEQA Caselaw Updates

### Key Projects

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**Client:** Marin Wildfire Prevention Authority

**Project:** On-Call Environmental Compliance Consulting for Wildfire Prevention/Hazard Mitigation Projects (Marin County, CA)

**Role:** Project Manager

Marin County voters passed Measure C in 2020, which established a 17-member Joint Powers Authority, the Marin Wildfire Prevention Authority (MWPA), to fund and oversee proactive state-of-the-art wildfire prevention and preparedness efforts within the County. Panorama was

hired to assist the MWPA in conducting environmental compliance for projects in the annual Work Plan that qualify as a project under CEQA or NEPA as well as develop templates and processes to streamline environmental compliance and coordination for this new agency. Caitlin has been instrumental in developing these processes for the MWPA and coordinating among all the member and partner agencies for Core Projects. She has coordinated, prepared for, and led meetings with partner agencies and regulatory agencies with finesse and skill. Caitlin has led the preparation and completion of 18 notices of exemption with robust support documentation since July 2022, with an additional 5 environmental compliance documents underway or anticipated to be finalized in the next several months for Core Projects in the 2021/2022 Work Plan.

She conducted senior review and clarified the project details for the Greater Ross Valley Shaded Fuel Break Project Addendum and Project Specific Analysis under the CAL FIRE Vegetation Treatment Program (CalVTP) EIR, which is undergoing finalization. Additionally, she prepared for and led a portion of the public outreach meeting as well as coordinated with partner agencies for this project. Caitlin prepared proposals for member agencies, including Novato Fire District, for the 2022/2023 Work Plan to assist in scoping and planning efforts. At least one project in the 2022/2023 Work Plan will also be an Addendum and PSA under the CalVTP EIR.

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**Client:** UC San Francisco

**Project:** UCSF Mount Sutro Open Space Reserve Vegetation Management Plan (San Francisco County, CA)

**Role:** Environmental Scientist

The UCSF Mount Sutro Open Space Reserve Vegetation Management Plan (plan) provides a management framework for protecting, enhancing, and restoring vegetation in the 61-acre Mount Sutro Reserve. The primary actions of the plan include forest treatments, management of high-risk trees, native plant restoration, and maintenance of trails and public access. Caitlin assisted in preparing the detailed project scenario necessary to conduct an adequate environmental analysis. She calculated air quality and greenhouse gas emission to identify the year with the greatest level of management actions to present a conservative analysis. She was responsible for preparing the analyses for air quality, greenhouse gases including carbon sequestration, hazards and hazardous resources, and finalizing geology and soils. She conducted research and calculations, to prepare several complex responses to Draft EIR comments. The EIR was certified in May 2018.

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**Client:** Midpeninsula Regional Open Space District

**Project:** Wildland Fire Resiliency Program (WFRP) and Program EIR (Santa Clara, San Mateo, and Santa Cruz Counties, CA)

**Role:** Deputy Project Manager

The WFRP would enable Midpen to conduct environmentally sensitive vegetation management for all of Midpen's preserves and other land under management agreements. The WFRP included four plans; Vegetation Management Plan, Prescribed Fire Plan at a programmatic level, Wildland Fire Pre-Fire Plan/Resource Advisor Maps, and Monitoring Plan. Caitlin was the Deputy Project Manager for the WFRP that covers all of Midpen lands and the Program EIR.

As part of the WFRP, she researched Midpen and other agency wildland fire policies and planning guidance, which were used to identify policy recommendations. She worked closely with Midpen and various specialists for the WFRP to ensure consistency within the program and develop a suite of probable projects for a given year. With this data she conducted the air quality and GHG emission calculations. She prepared or oversaw and conducted senior review of the entire Program EIR analysis, which was released for public review in January and certified in May 2021.

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**Client:** Midpeninsula Regional Open Space District

**Project:** Prescribed Fire Plan and Environmental Compliance (Santa Clara, San Mateo, and Santa Cruz Counties, CA)

**Role:** Project Manager

The purpose of the PFP is to define the activities that Midpen will implement to reinstate prescribed fire practices on their lands that reduce wildland fire risks, while also preserving and restoring biodiversity and minimizing effects on the environment. The PFP was addressed at a programmatic level but is now being expanded and defined to identify and delineate burn units, and define the implementation scale and schedule. Caitlin prepared the stakeholder and public outreach plan for the project-level PFP process. She will assist in preparing the PFP with the burn specialists. She will determine the appropriate level of environmental compliance following further specification of the PFP.

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**Client:** Marin Municipal Water District

**Project:** Biodiversity, Fire, and Fuels Integrated Plan and EIR (Marin County, CA)

**Role:** Deputy Project Manager

The Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) details management actions, including fuelbreak construction, fuelbreak maintenance, forest management, and invasive species management, for the 21,600 acres of Marin Municipal Water District (District) lands. Caitlin served as the Deputy Project Manager and oversaw completion of the EIR, which was certified in September 2019. She reviewed the plan to identify inconsistencies and clarifications to ensure a clear project description. She calculated the air quality and greenhouse gas emission for the baseline activities and the maximum activity level that could occur within District lands. She analyzed the impacts and addressed client comments. Caitlin outlined and implemented a methodology to conduct clear, easy to understand analyses for a nuanced, detailed Plan.

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**Client:** Mono County

**Project:** Walker Basin Water Transactions Program and EIR (Mono County, CA)

**Role:** Environmental Scientist

The program involves General Plan amendments that would set policies to address water transactions associated with the operation of the Walker Basin Restoration Program (WBRP) in Mono County. Caitlin reviewed the feasible water transactions and developed clear scenarios to conduct the environmental analyses. She clarified the project extent based on water rights availability and data. She conducted research and several environmental analyses in the EIR incorporating the detailed water rights transactions scenarios. The project was put on hold.

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**Client:** San Lorenzo Valley Water District (SLVWD)

**Project:** Post-Fire Recovery, Critical Asset Hardening, Vegetation, and Fuels Management Plan; Grant Application Support; and Environmental Compliance (Santa Cruz County, CA)

**Role:** Program Manager

Panorama was hired to conduct several tasks for SLVWD to assist in identification of fuel reduction projects and finding grants that could support these fuel reduction projects. During preparation of the management plan the CZU Lightning Complex ignited and burned much of SLVWD land and infrastructure. Caitlin led the preparation, research, and completion of the Post-Fire Recovery, Critical Asset Hardening, Vegetation, and Fuels Management Plan, which was approved in June 2022. Prior to the fire, Caitlin identified a suite of grants that could be applied for to fund a range of wildfire management projects, which were laid out in the Plan. She identified permitting and environmental review approaches that SLVWD could implement to conduct the projects recommended in the Plan.

Caitlin prepared several grant applications for the CAL FIRE California Forest Improvement Program (CFIP), Resource Conservation District (RCD) of Santa Cruz County CAL FIRE Forest Health Grant, and California Coastal Conservancy (CCC) Forest Health and Wildfire Resilience Program in 2021 and grant applications for the CAL FIRE Fire Prevention Grant Program and CCC Forest Health and Wildfire Resilience Program in early 2022, which are still under review.

In 2021, SLVWD was awarded approximately \$200,000 through the CCC Forest Health and Wildfire Resilience Program to conduct defensible space treatments around critical water infrastructure. She assisted SLVWD in preparation and planning for implementation of several defensible space projects around critical water infrastructure for late 2021 and early 2022. This involved preparation of contractor requests for proposals, preparation of environmental compliance documentation, and preparation and provision of worker environmental awareness training. She prepared the Notice of Exemption and support documentation to address vegetation removal and thinning up to 100 feet around critical water infrastructure and roadways, which was determined to be exempt under the California Environmental Quality Act (CEQA) under a Class 4 categorical exemption and was filed by SLVWD in August 2021. The CCC approved the 2022 preliminary grant application and Caitlin is underway preparing the final grant application for SLVWD. The RCD and CAL FIRE have approved several hundred thousand dollars of funding for SLVWD vegetation and forest health projects that Caitlin identified and prepared proposals for under the RCD's approved CAL FIRE Forest Health Grant. SLVWD was also awarded funding to prepare a Forest Management Plan (FMP) under the CFIP in February 2021. Caitlin managed preparation of the FMP, which was approved by CAL FIRE in December 2021.

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**Client:** Stanford University

**Project:** Vegetation Management Plan (Santa Clara and San Mateo Counties, CA)

**Role:** Environmental Scientist

Panorama was hired to conduct outreach and a policy review and analysis to ultimately prepare an update to Stanford's previous vegetation management plan. Caitlin assisted in jurisdictional outreach including identifying the specific individuals who would be interested and provide

valuable feedback for the planning process. She conducted an extensive review of the local policies and regulations that would or may apply to the client’s property. The various potential permits were laid out into flow charts for easier use to identify which would apply under which circumstances. Caitlin conducted background research for the vegetation management plan while the modeling is underway.

**Client:** Inyo County Department of Public Works  
**Project:** Sabrina Road Bridge Replacement Project (Inyo County, CA)  
**Time:** 2015 to 2016  
**Role:** Environmental Planner

The Sabrina Road Bridge was replaced, resulting in temporary and permanent impacts to CDFW jurisdictional riparian habitat. In accordance to the Streambed Alteration Agreement, revegetation activities were conducted in 2013. The site was not meeting revegetation targets and additional revegetation has been necessary. Caitlin coordinated with the biologist to conduct a site visit in mid-2016. She assisted the biologist in preparing an easy to understand, robust Site Characterization Report detailing survivorship from the 2013 replanting, the 2016 survey results, and 2016 replanting efforts. In coordination with the biologist and consultation with CDFW, Caitlin prepared the 2016 Riparian Mitigation Plan, which updated the 2012 Riparian Mitigation Plan. She coordinated the timing for the 2016 revegetation efforts, in compliance with the 2016 Riparian Mitigation Plan. She prepared the initial draft of the Fourth Annual Monitoring Report summarizing the status of the site, which was submitted to CDFW for review and approval.

**Client:** Inyo County Department of Public Works  
**Project:** Trona-Wildrose Road (Lower Trona) Storm Damage Repair Project (Inyo County, CA)  
**Time:** 2015 to 2016  
**Role:** Environmental Planner

Emergency repairs were conducted on Trona-Wildrose Road in 2014, during which time a temporary haul road was graded parallel to the road. Permanent restoration of the road and the temporary haul road, excluding CDFW jurisdictional areas, occurred in 2016. Caitlin worked with the biologist to prepare the Nesting Bird Plan. She coordinated with CDFW to get the Nesting Bird Plan and the Designated Biologists approved prior to construction. She prepared the Training Program and Construction Guide which were reviewed and approved by the County. After construction was completed, she prepared the Post-Construction Report which was sent to and approved by CDFW.

**Client:** Inyo County Public Works Department  
**Project:** Walker Creek Road Bridge Replacement Project IS/MND and CE (Inyo County, CA)  
**Role:** Environmental Planner

The proposed project would install a new bridge over the Los Angeles Aqueduct, close the existing bridge to public vehicular traffic, and realign Walker Creek Road as it approaches the bridge in either direction. The proposed project will use Federal Highway Administration (FHWA) funding for the bridge replacement and requires CEQA and NEPA documentation.

Caltrans (delegated by FHWA) is the NEPA lead agency. Caitlin prepared a draft IS/MND and finalized the Biological Assessment, which focused on Mojave desert tortoise due to presence of habitat, for submittal to USFWS through Caltrans. Caitlin maintained communication with the engineering team and the County to update the project description and analysis based on engineering changes as well as ensure that project deadlines were met. She monitored the budget of the project to ensure all appropriate documentation can be completed as scoped.

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**Client:** Inyo County Department of Public Works

**Project:** Carroll Creek Road Bridge Replacement Project IS/MND and CE (Inyo County, CA)

**Role:** Environmental Planner

The proposed project would install a new bridge over the Los Angeles Aqueduct, close the existing bridge to public vehicular traffic, and realign Walker Creek Road as it approaches the bridge in either direction. The proposed project will use FHWA funding for the bridge replacement and requires CEQA and NEPA documentation. Caltrans (delegated by FHWA) is the NEPA lead agency. Caitlin conducted technical resource analyses for the draft IS/MND including biological resources and air quality.

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**Client:** Bureau of Land Management

**Project:** Gemini Solar Project EIS and Technical Reports (Clark County, NV)

**Role:** Deputy Project Manager

The Gemini Solar Project (project) is a 690-MW solar photovoltaic power generating and battery storage facility located on BLM lands to the south of Las Vegas. Caitlin managed several components of this project during the environmental review process to ensure that a quality product is produced within the required deadlines, in light of the recent NEPA streamlining requirements. She took an active role in conducting technical calculations required to define and analyze the project, in addition to ensuring consistency across the EIS and the many supplemental technical reports. Caitlin coordinated extensively with BLM to understand and address the key issues and concerns.

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**Client:** Confidential

**Project:** Confidential Solar Project NEPA Technical Reports (Clark County, NV)

**Role:** Environmental Scientist

The solar project is a large photovoltaic power generating and battery storage facility located on BLM lands to the south of Las Vegas. Caitlin has managed updating and ensuring consistency within the Plan of Development. She has prepared the alternatives review and preliminary analyses. She has also prepared the air quality and socioeconomics reports, involving coordination with technical specialists and conducted senior review of several reports prepared by other team members. This project was put on hold.

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**Client:** U.S. Army Corps of Engineers

**Project:** Westbrook Project EIS (Placer County, CA)

**Role:** Project Planner

The project would develop a mixed-use, master planned community on a 397-acre site near the City of Roseville. The Proposed Action would affect 9.61 acres of wetlands requiring USACE approval. Caitlin aided in preparation of the EIS including reviewing technical reports, writing environmental analyses, addressing client and attorney comments as well as attending conference calls with the client and developer to maintain schedule and address data needs.

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**Client:** U.S. Army Corps of Engineers

**Project:** Placer Vineyards Specific Plan EIS (Placer County, CA)

**Role:** Project Planner

The project would develop a mixed-use community on a 3,749-acre site near the City of Roseville. The project would affect 119.3 acres of wetlands requiring USACE approval. Caitlin aided in preparation of the EIS including reviewing technical reports, writing environmental analyses, addressing client and attorney comments as well as attending biweekly conference calls with the client to maintain schedule and address concerns.





## JESSICA KOTEEN, SENIOR MANAGER

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### Overview of Experience and Expertise



**Jessica Koteen** has over 22 years of experience as an environmental compliance and regulatory permitting specialist. She has worked with both the private and public sectors on a wide range of projects, including recreation and community master planning, new school construction, wind energy development, and park and trail development. As a project manager, her skills span the California Environmental Quality

Act (CEQA), the Montana Environmental Policy Act (MEPA), and the National Environmental Policy Act (NEPA) compliance, interagency coordination, regulatory permitting, and the facilitation of community outreach efforts. Jessica has been working with numerous federally recognized tribes throughout California to manage the NEPA components for a variety of projects on their Reservations, including multiple projects for the Bishop Paiute Tribe in Bishop, CA. She has also assisted in the development of Forest Service Environmental Assessments and Management Plans throughout Montana and Idaho, including assisting the Flathead National Forest with preparation of their Comprehensive River Management Plan, consistent with the statutory direction of the Wild and Scenic Rivers Act of 1968 (Public Law 90-542), that protects and enhances the free flowing conditions, water quality and outstandingly remarkable values (ORV) of the designated Wild and Scenic segments of Flathead River. In addition, she also recently completed the Comprehensive River Recreation Management Plan for the Helena Lewis and Clark National Forest (HLC) Gates of the Mountains Recreation Area and surrounding Missouri River Corridor. The Plan will guide future management decisions and actions within the framework of existing public policy and resource plans.

#### EDUCATION

- MS, Environmental Economics (Recreation and Instream Flows emphasis), Colorado State University
- BS, Environmental Economics, Colorado State University

## Key Projects

### United States Forest Service NEPA/Planning Experience

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**Client:** USFS

**Project:** Flathead River Comprehensive River Management Plan, Flathead County, Montana.

**Role:** Regulatory Specialist

Jessica assisted the Flathead National Forest (FNF) with preparation of their Comprehensive River Management Plan, consistent with the statutory direction of the Wild and Scenic Rivers Act of 1968 (Public Law 90-542), that protects and enhances the free flowing conditions, water quality and outstandingly remarkable values (ORV) of the designated Wild and Scenic segments of Flathead River. This management plan includes the North Fork, Middle Fork and South Fork of the Flathead River. Jessica assisted with the Recreation Analysis as it relates to the Comprehensive River Management Plan (CRMP) for the Flathead Wild and Scenic River (WSR). The work deliverables included NEPA services to produce a draft and final CRMP, with an associated Environmental Assessment (EA). The CRMP is expected to be land management planning amendment to the Flathead Forest Plan, and corresponding Glacier National Park General Management Plan.

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**Client:** USFS

**Project:** Gates of the Mountains and Missouri River Corridor Comprehensive River Recreation Management Plan, Lewis and Clark County, Montana.

**Role:** Regulatory Specialist

Jessica assisted the Helena Lewis and Clark National Forest (HLC) with preparation of their Comprehensive River Recreation Management Plan (CRRMP). The HLC in cooperation with the Bureau of Land Management (BLM) developed a CRRMP for the Gates of the Mountains Recreation Area and surrounding Missouri River Corridor. This plan will guide future management decisions and actions within the framework of existing public policy and resource plans. As one of the primary purposes, recreation is a key management consideration at the Gates of the Mountains river corridor. The work deliverables included a draft and final CRRMP, along with plans for future development.

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**Client:** USFS

**Project:** Fern Hardy Resource Area Project, Kootenai County, Idaho.

**Role:** NEPA Specialist

Jessica completed NEPA Support Services for the United States Forest Service, Region 1 - Fern Hardy Supplemental Environmental Assessment (SEA). The original EA was prepared in 2011 by the Idaho Panhandle Forest Service, Coeur d'Alene River Ranger District, for the 13,300-acre Fern Hardy Resource Area located in Kootenai County, Idaho. The project addressed Title I of the Healthy Forest Restoration Act (HFRA), which was part of a series of projects on the Coeur d'Alene River Ranger District designed to respond to the National Fire Plan and other direction

emphasizing reducing fuel presence and the risks that uncontrolled fires pose to communities. The SEA reviewed additional action alternatives not previously analyzed in the 2011 EA.

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**Client:** USFS

**Project:** Blacktail Road Improvement Project, Flathead County, Montana.

**Role:** NEPA Specialist

Jessica completed NEPA support Services for the United States Forest Service, Region 1 - Blacktail Road Improvement Project EA. The Blacktail Road serves as primary access to National Forest in the Blacktail Mountain area from the community of Lakeside, Montana and U.S. Highway 93. Blacktail Road provides access to the Blacktail Mountain Ski Area, motorized and non-motorized trail systems, Blacktail Nordic Cross Country Ski trail system, and other recreation such as huckleberry picking and driving for pleasure. Blacktail Road is also a primary route for National Forest management and access to adjacent private lands. Recent analysis and field reviews have found worn road surfacing, stability and erosion concerns, and concern for level of traffic service. Jessica assisted the Forest Service Region 1 with preparing of the EA analysis sections, including recreation.

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### Tribal NEPA/Planning Experience

**Client:** Bishop Paiute Development Corporation

**Project:** Bishop Paiute Healthcare Facility, Bishop, Inyo County, California.

**Role:** Project Manager

This project involved the construction of a new 55,000-square-foot healthcare facility located on the Bishop Paiute Reservation. Jessica managed the Environmental Assessment, prepared in accordance with the Tribal Environmental Policy Ordinance No. 98-20 and the guidelines contained in the BIA NEPA Guidebook. In addition, the project involved financial assistance from the U.S. Department of Agriculture (USDA) Rural Utilities Services (RUS), which thereby made it a federal action subject to the review under NEPA, NHPA, and all applicable federal environmental laws and regulations. Jessica ensured that the Environmental Assessment (EA) was prepared in accordance with Code 7 of the Federal Regulations (CFR) Part 174, RUS' Environmental Policies and Procedures, and 40 CFR Parts 1500-1508, the regulations promulgated by the Council on Environmental Quality for implementing NEPA.

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**Client:** Bishop Paiute Development Corporation

**Project:** Bishop Paiute West Line Street Retail Project EA, Inyo County, California.

**Role:** Project Manager

Jessica prepared an Environmental Assessment to support the construction and operation of a proposed new gas station, convenience store and retail space to be located on the Bishop Paiute Reservation. The EA was prepared in accordance with the Tribal Environmental Policy Ordinance Number (No.) 98-20 (TEPO) and the guidelines contained in the Bureau of Indian Affairs (BIA) National Environmental Policy Act (NEPA) Guidebook (59 IAM 3-H), August 2012. The guidelines are consistent with NEPA implementing regulations (40 Code of Federal Regulations [CFR] 1500–1508). In addition, the Tribe received financing assistance from the U.S.

Economic Development Administration (EDA) Grants Program for the proposed action, which thereby makes it a federal action subject to the review under NEPA, the National Historic Preservation Act (NHPA), and all applicable federal environmental laws and regulations. This EA was prepared in accordance with Code 7 of the Federal Regulations (CFR) Part 174, EDA's Environmental Policies and Procedures, and 40 CFR Parts 1500–1508, the regulations promulgated by the Council on Environmental Quality for implementing NEPA. The EA also addressed other laws, regulations executive orders, and guidelines promulgated to protect and enhance environmental quality including, but not limited to, the Endangered Species Act, the Farmland Protection Policy Act, the Clean Water Act, and executive orders governing floodplain management, protection of wetlands, and environmental justice.

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**Client:** Bishop Paiute Development Corporation  
**Project:** Bishop Paiute Hotel and Casino Expansion, Inyo County.  
**Role:** Project Manager

This project involved the construction of a new hotel and the expansion of the existing Paiute Palace Casino located on the Bishop Paiute Reservation, within the City of Bishop. Jessica recently completed environmental compliance documentation, which consisted of a CEQA Tribal Environmental Assessment, consistent with the requirements of the State of California Tribal Compact for the development of Gaming Facilities. In addition, Jessica also ensured compliance in accordance with the Tribal Environmental Policy Ordinance No. 98-20 and the guidelines contained in the Bureau of Indian Affairs NEPA Guidebook.

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**Client:** Coyote Valley Band of Pomo Indians  
**Project:** West Fork Russian Riverbank Stabilization Project  
**Role:** Project Manager

Jessica assisted the Coyote Valley Band of Pomo Indians with permitting and CEQA/NEPA compliance to support Bank Stabilization of the West Fork Russian River within the Reservation. The environmental compliance document, which was a joint CEQA/NEPA document, Initial Study/Environmental Assessment (IS/EA), has been prepared for the U.S. Bureau of Indian Affairs (BIA), the United States Environmental Protection Agency (EPA) and the California Department of Fish and Wildlife (CDFW). The Tribe has requested financing assistance from the Water Resources Funding from the BIA, CWA 319 Grant through the EPA, and Tribal Technical Assistance through the Bureau of Reclamation (BOR), which thereby makes it a federal action subject to the review under NEPA, the National Historic Preservation Act (NHPA), and all applicable federal environmental laws and regulations. In addition, a portion of the project is located on non-Reservation land and therefore, compliance with CEQA was required. Jessica is currently assisting the Tribe with ensuring various permit requirements are met during construction.

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**Client:** Coyote Valley Band of Pomo Indians  
**Project:** Wastewater Treatment Facility – Environmental Assessment  
**Role:** Project Manager

This project involved the construction of a new wastewater treatment facility located on the Coyote Valley Band of Pomo Reservation. Jessica recently completed the EA, prepared in

accordance with the guidelines contained in the Bureau of Indian Affairs NEPA Guidebook. In addition, the project involved financial assistance from the U.S. Department of Housing and Urban Development (HUD), which thereby made it a federal action subject to the review under NEPA, NHPA, and all applicable federal environmental laws and regulations. Jessica ensured that the EA was prepared in accordance with Code 7 of the Federal Regulations (CFR) Part 174, 40 CFR Parts 1500-1508, the regulations promulgated by the Council on Environmental Quality for implementing NEPA.

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**Client:** Karuk Tribe

**Project:** New Medical/Dental Clinic and Transfer of Land from Fee to Trust, Happy Valley, CA.

**Role:** Project Manager

The proposed project included the transfer of approximately 5.87 acres from fee to trust, and the construction of an approximately 10,000 square foot clinic new medical and dental clinic. Jessica managed and prepared NEPA compliance documents, prepared in accordance with the guidelines contained in the Bureau of Indian Affairs NEPA Guidebook. In addition, the project involved financial assistance from the U.S. Department of Housing and Urban Development (HUD), which thereby makes it a federal action subject to the review under NEPA, NHPA, and all applicable federal environmental laws and regulations.

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**Client:** Pit River Health Services

**Project:** New Health Care Clinic (Shasta County, CA)

**Role:** Project Manager

Jessica is the Project Manager for the preparation of an Environmental Assessment pursuant to the NEPA requirements for the USDA Rural Development grant process. The Pit River Health Services is applying for grant funds for the development of a new Health Care Facility to be constructed adjacent to the current facility, to provide additional services that are currently being referred out of the area.

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**Client:** Robinson Rancheria of Pomo Indians

**Project:** Fee-to-Trust Application Materials

**Role:** Project Manager

Jessica recently assisted the Robinson Rancheria of Pomo Indians with fee-to-trust application materials, including a Phase I Environmental Site Assessment and Environmental Report, summarizing the results of preliminary environmental analysis of the transfer of land from fee-to-trust status.

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**Client:** Chicken Ranch Rancheria of Me-Wuk Indians

**Project:** New Hotel and Casino Project – Tribal Environmental Impact Report

**Role:** Project Manager

Jessica recently completed the Tribal Environmental Impact Report (EIR) to support the Chicken Ranch Rancheria's new hotel and casino project on the Chicken Ranch Reservation in Tuolumne County, California. The Tribal EIR is being prepared consistent with Section 10.8 of the Tribal-State Class III Gaming Compact between the Tribe and the State of California (Compact), as well as the Chicken Ranch's Tribal Environmental Policy Ordinance. The Tribal

EIR is analyzing the potential for off-reservation environmental impacts to occur because of construction and operation of the project. In addition, Jessica secured all applicable environmental permits through the United States Army Corp of Engineers and the United States Environmental Protection Agency.

### Other NEPA/Planning Experience

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**Client:** Stockton Street Properties, Inc.  
**Project:** 2 Stockton Street (San Francisco, CA)  
**Role:** Project Manager

Jessica is the Project Manager for the preparation of a MND for the addition of two office floor levels and a smaller penthouse office level, including an outdoor terrace, on top of an existing four-story building.

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**Client:** San Francisco University High School  
**Project:** 3150 California Street (San Francisco, CA)  
**Role:** Technical Support

Jessica is providing document reviews and attending meetings with EP and the client for the preparation of an IS/MND for the construction of a new academic building for the San Francisco University High School campus.

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**Client:** California Public Utility Commission  
**Project:** Gorman – Kern Transmission Line Rating and Remediation Project (Kern and Los Angeles County, CA)  
**Role:** Project Manager

Jessica is the Project Manager for the preparation of the Environmental Impact Report for the Gorman-Kern TLRR Project. The project involves replacing poles and conductor along a 65-mile-long section of 66-kV transmission lines and modifying substations in Kern and Los Angeles County. Jessica is managing the application review process, facilitated AB 52 coordination, conducted agency and stakeholder outreach, and managing the preparation of an EIR pursuant to CEQA.

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**Client:** Quincy Engineering  
**Project:** Forrester Road over Westside Main Canal Bridge Replacement Project (Imperial County, CA)  
**Role:** Project Manager

Jessica is the Project Manager for the preparation of NEPA and CEQA compliance documents for a bridge replacement in Imperial County. Jessica is managing the preparation of a Categorical Exclusion pursuant to NEPA as well as numerous Caltrans studies and permit applications. In addition, Jessica is managing the IS/MND on behalf of Imperial County.

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**Client:** Southern California Edison  
**Project:** San Joaquin Cross Valley Loop Project, Tulare County, CA  
**Role:** Project Manager

Jessica managed the biological support services for the construction of a new 23-mile double-circuit 220-kV transmission line near the City of Visalia, Tulare County, California. Jessica

managed the key support personnel to the project including the environmental field representative/lead biologist, biological monitors, and avian biologists. As a result of the preconstruction surveys performed during the project and the diligence of the biological monitors, no take incidents involving special-status species are known to have occurred under Jessica's involvement. Under Jessica's environmental oversight, the Cross Valley Loop Project had the distinction of receiving the fewest number of compliance violation reports among all SCE projects of that scope.

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**Client:** Southern California Gas Company  
**Project:** Pipeline Safety Enhancement Plan (PSEP) Project  
**Role:** Program Manager

For the Southern California Gas Company, Jessica served as program manager for a team of construction monitors and was responsible for environmental compliance during construction at project sites throughout San Luis Obispo and Santa Barbara counties, the San Joaquin Valley, and Southern California. Additionally, she supported preconstruction planning, managed preconstruction field assessments, and analyzed biological constraints as part of detailed environmental reviews for various project activities including pipeline replacement, hydrostatic testing, and pipeline inspections.

## RITA WILKE, SENIOR MANAGER

### Overview of Experience and Expertise



Rita joined Panorama in 2012 and has 12 years of experience in the environmental field, and over 15 years of experience. Rita is a skilled project manager for projects requiring environmental review under the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Rita has managed environmental compliance and conducted impact analyses for a variety of projects including fire and fuels management, electricity and water transmission, energy, transportation, and redevelopment projects. Rita has a strong understanding of permitting processes and has prepared permit applications for U.S. Army Corps of

Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Boards. Rita has also managed the preparation Biological Assessments to support U.S. Fish and Wildlife Service (USFWS) consultation under Section 7 of the Endangered Species Act. She has experience coordinating with state and federal agencies throughout project definition, preparation of the environmental document, and project construction. Rita manages and conducts compliance monitoring for public works and transmission projects.

#### EDUCATION

- B.S., Ecology, San Francisco State University (cum laude)
- B.A., German, San Francisco State University (cum laude)
- A.A., Humanities, Los Rios Community College

#### SPECIALIZED TRAINING

- Advanced CEQA Workshop, Association of Environmental Professionals (AEP)
- Basic CEQA and NEPA Workshops, AEP
- Restoration Ecology Field Course, San Francisco State University, Spring 2009
- Wetland Delineation Training Program. 40-Hour, fulfilling U.S. Army Corps of Engineers Wetland Delineation Training Requirements, April 2019

### Key Projects

**Client:** Alpine County Community Development Department

**Project:** Wildfire Hazard Risk Mitigation Plan and IS/MND (Alpine County, CA)

**Role:** Project Manager

Alpine County received grant funding from CALFIRE to develop a Wildfire Hazard Risk Mitigation Plan. Rita managed subconsultant data collection, fire modeling, and identification of high value resource assets, as well as coordination with the Alpine County Steering



Committee during development of the Plan. Rita collaborated with the Steering Committee and subconsultants during preparation of the county-wide Wildfire Risk Mitigation Plan (WRMP), which identified a total of 12 project treatment areas, including three priority projects. Rita coordinated with County staff to develop and implement an outreach program and managed the preparation of a public outreach strategy and meeting materials, including agenda, presentation, posters, and handouts. Rita also managed preparation of an Initial Study/Mitigated Negative Declaration for the WRMP. She conducted tribal consultation and coordinated with technical expert subconsultants to complete biological and cultural resource reviews of the priority project areas. Additionally, Rita prepared a work plan that identified tasks and responsible parties that would be necessary to reach project implementation for three high-priority projects and nine lower priority projects. The WRMP and IS/MND received praise from and were adopted unanimously by the County Board of Supervisors in mid-February 2021.

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**Client:** San Mateo Resource Conservation District  
**Project:** El Granada Wildfire Risk Scoping Project (San Mateo County, CA)  
**Role:** Project Manager

The community of El Granada is located in unincorporated coastal San Mateo County within and adjacent to a CAL FIRE designated Very High Fire Severity Zone. This designation is based upon risk modeled on multiple variables including vegetation, topography, and wind patterns. Rita is managing a wildfire risk assessment for El Granada and the surrounding area. The wildfire risk assessment includes ignition probability, fire behavior, potential fire spread, and general identification of values at risk. Based on the identified risks to the community, Panorama is developing a suite of actions to most effectively reduce risks and build wildfire resiliency. As project manager, Rita is responsible for managing subconsultant preparation of wildfire risk assessment, facilitating team meetings with stakeholders, and preparation of a final report documenting the risk assessment and suite of actions to reduce risk.

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**Client:** Midpeninsula Regional Open Space District (MROSD)  
**Project:** Wildland Fire Resiliency Program and Program EIR (Santa Clara County, Santa Cruz County, and San Mateo County, CA)  
**Role:** Sr Environmental Scientist

The Midpeninsula Regional Open Space District is creating a Wildland Fire Resiliency Program to address wildfire risk in the District's 65,000 acres of open space preserves. Rita coordinated with subconsultants to prepare the hydrology and geology sections of the Program EIR. She conducted technical reviews of the EIR sections.

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**Client:** Santa Clara Valley Water District (Valley Water)  
**Project:** Wildfire Risk Reduction Treatments Plan for Water Facilities (Santa Clara County, CA)  
**Role:** Project Manager

The project involves preparation of a Wildfire Risk Reduction Treatments Plan for six Valley Water facilities throughout their service area. Panorama managed subconsultant wildfire resiliency experts to conduct site visits to each of the six facilities and identify areas of wildfire risk and propose recommended treatments to reduce wildfire risk. Rita managed preparation of

the Plan and coordinated with Valley Water and subconsultant staff regarding plan implementation timing and external agency coordination necessary for specific actions.

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**Client:** Marin Municipal Water District (MMWD)  
**Project:** Biodiversity, Fire and Fuels Integrated Plan and EIR (Marin County, CA)  
**Role:** Environmental Analyst

The Biodiversity, Fire and Fuels Integrated Plan outlines a program for fire management and biodiversity protection for lands managed by the MMWD. Panorama assisted with the development of the Plan and prepared a Programmatic EIR in compliance with CEQA. Rita researched local biological regulations and conducted impact analyses for Hazards, Fire, Cultural Resources, Aesthetics, Noise, Recreation, and Traffic. Rita prepared a comprehensive list of cumulative projects and analyzed cumulative effects of Plan implementation for the EIR.

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**Client:** Alpine County Community Development Department  
**Project:** Dixon Mine Road Bridge Replacement Project (Alpine County, CA)  
**Role:** Project Manager

The project involves demolition of an existing bridge on Dixon Mine Road and construction of a new bridge in the same location. Rita provided permit compliance and environmental support during construction of the project. Rita obtained permit amendments from CDFW, USACE, and the Water Board for a change in project construction procedures that was required due to extremely high water levels in Wolf Creek as a result of a very wet 2018/19 winter. Permits were amended within 4 weeks of receiving a contract and the bridge was constructed in one construction season, despite a delayed start date (late July 2019).

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**Client:** Alpine County Community Development Department  
**Project:** Hot Springs Road Bridge Replacement Project (Alpine County, CA)  
**Role:** Project Manager

The project involves demolition of an existing bridge on Hot Springs Road between the town of Markleeville and Grover Hot Springs State Park. Rita is providing construction compliance support to oversee the implementation of mitigation measures and permit conditions. The bridge will be constructed over two seasons in 2022 and 2023.

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**Client:** Inyo County Department of Public Works  
**Project:** Walker Creek Road Bridge Replacement Project (Inyo County, CA)  
**Role:** Project Manager

The project involves the construction of a new bridge over the Los Angeles Department of Water and Power's (LADWP) Los Angeles Aqueduct and taking the existing bridge out of service. The approach road to the bridge would be realigned. The project uses Federal Highway Administration funding for the bridge replacement and requires CEQA and NEPA documents. Caltrans (delegated by FHWA) is the NEPA lead agency. Rita is managing the environmental studies and reports that will be used to support the NEPA and CEQA document. She is also managing agency coordination. Rita worked with the County and engineering team to define the project and prepare the Initial Study/Mitigated Negative Declaration under CEQA. The project is within known desert tortoise habitat and cultural resource sensitivity in the area is

high. Rita managed the preparation of the IS/MND and all environmental studies. Rita also managed the preparation of a Biological Opinion to support consultation with USFWS. Rita conducted consultation with CDFW and managed the preparation of the application for Incidental Take Permit (desert tortoise and Mohave ground squirrel) from CDFW.

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**Client** Inyo County Department of Public Works  
**Project** Carroll Creek Road Bridge Replacement Project (Inyo County, CA)  
**Role** Project Manager

The project involves installation of a new bridge over the LADWP’s Los Angeles Aqueduct and taking the existing bridge out of service. A portion of the approach road would be realigned. The project is funded by the Federal Highway Administration and requires environmental studies to be conducted in coordination with Caltrans, the NEPA lead agency. The project also involves acquiring right-of-way from BLM for the realigned bridge approach roadway. Rita worked with the County and engineering team to define the project and prepare an IS/MND under CEQA. Rita also prepared environmental studies using Caltrans Standard Environmental Reference to support a NEPA Categorical Exclusion.

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**Client** Inyo County Department of Public Works  
**Project** Upper Trona Wildrose Road Scour Repair Project (Inyo County, CA)  
**Role** Project Manager

Rita worked with the County and engineering team to define impacts of severe desert storms on Trona Wildrose Road, north of Panamint Valley Road, which occurred in July 2013. The project is funded by the California Office of Emergency Services and therefore involves strict adherence to funding requirements. This portion of Trona Wildrose Road crosses Death Valley National Park and BLM land. Rita coordinated environmental review, project approval, and construction schedules with NPS and BLM. A challenging aspect of this project was identifying environmental review procedures of each federal agency and preparing a single environmental document that addressed the concerns of all parties. Rita managed biological and cultural subcontractors who conducted pedestrian surveys and prepared report findings. Rita managed the preparation of permit applications to CDFW and the Regional Water Quality Control Board. Permits were deemed complete upon first draft thereby expediting the process of receiving permits. The project was successfully constructed in the summer of 2017.

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**Client** Inyo County Department of Public Works  
**Project** Trona Wildrose Road (South of Panamint Valley Road) Emergency Opening and Permanent Restoration Project (Inyo County, CA)  
**Role** Environmental Scientist/Project Manager

The project involves the emergency reopening and permanent restoration of Trona Wildrose Road south of the intersection with Panamint Valley Road. As an Environmental Scientist, Rita worked with the project manager and engineering team to define impacts of severe desert storms on Trona Wildrose Road, which occurred in July 2013. Rita mapped the ephemeral waterways within the project area using aerial imagery and data from biological surveys. Rita drafted the permit notification package for a Streambed Alteration Agreement from CDFW. Rita is the Project Manager for construction support and is managing biological studies and

mitigation monitoring to ensure permit compliance throughout road paving and revegetation activities. Support activities include agency and meeting coordination, revegetation plan definition, and consensus building between all parties involved. The project's revegetation phase requires coordination with Inyo County, BLM, and Caltrans.

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**Client** Inyo County Department of Public Works  
**Project** Inyo County Emergency Road Reopenings (Inyo County, CA)  
**Role** Environmental Scientist

Rita worked with the Panorama team project manager to define the project by identifying impacts of the July 2013 desert storms on eight affected Inyo County roads. Impact areas along eight desert roads were mapped using Google Earth imagery. Rita and another staff member prepared permit applications for California Department of Fish and Wildlife and Lahontan Water Quality Control Board. Rita also prepared Caltrans Preliminary Environmental Study (PES) forms for four impacted roads.

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**Client** County of Inyo  
**Project** Sabrina Road Bridge Replacement Project (Inyo County, CA)  
**Role** Environmental Scientist/Project Manager

Rita assisted with the development of an environmental training program and prepared the training materials for construction crews. Rita managed a local biologist to complete biological mitigation monitoring and annual report preparation documenting the revegetation of the site. Rita coordinated annual site visits with the biologist and County staff, reviewed monitoring reports, and coordinated with regulatory staff regarding the status of revegetation at the site.

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**Client** County of Inyo  
**Project** Lone Pine Roadway Rehabilitation and Bike Lane Project (Inyo County, CA)  
**Role** Project Manager

The Inyo County Public Works Department proposes roadway and pedestrian improvements to 12 streets in the town of Lone Pine, California. Improvements include resurfacing of roadways, adding bike lanes, and installing ADA-compliant pedestrian facilities. Rita prepared the Preliminary Environmental Analysis Report (PEAR) following Caltrans format. The PEAR supports the project's Project Study Report, which is used to initiate a project and identify funding allocations. Rita managed biological surveys to identify potential biological impacts of project construction and prepared a preliminary environmental budget to secure adequate funding. The project was on a fast-track schedule and all work needed to be completed in 1 month.

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**Client** County of Inyo  
**Project** Sunland Drive Culvert Extension Project (Inyo County, CA)  
**Role** Project Manager

The County had recently widened Sunland Drive to include bike lanes but the new road width was too wide for the existing culvert and edges of the road were in danger of sloughing into the waterway. Rita assisted the County in obtaining a 401 and Waste Discharge Requirements Certification from the Lahontan Regional Water Quality Control Board for a culvert that needed

to be extended. Rita consulted with Water Board staff and drafted the permit application. The permit was received within 60 days of Panorama receiving notice to proceed.

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**Client:** Eavor  
**Project:** Valmy Geothermal Exploration (Humboldt County, NV)  
**Role:** Deputy Project Manager

Panorama is assisting Eavor with the identification of well pad locations and permitting strategy for geothermal development in Humboldt County. Rita coordinated with state agencies and Humboldt County staff to understand the permitting requirements and timelines for a geothermal exploration well. Rita managed preparation of a draft NEPA Categorical Exclusion to submit with the drilling application to the Bureau of Land Management.

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**Client** Plumas County Department of Public Works  
**Project** Spanish Ranch Road Bridge Construction Oversight (Plumas County, CA)  
**Role** Project Manager

The project involves replacing Spanish Ranch Road Bridge, a single-span one-lane bridge over Spanish Creek, with a new, double-span two-lane bridge in the same alignment. The purpose of the project is to improve public safety, address the structurally deficient bridge, and increase creek capacity under the bridge during high-flow events. Rita is providing environmental compliance oversight for construction of the bridge. Rita negotiated a 1600 permit amendment to modify the permitted construction detour and managed preparation of an Incidental Take Permit application in one week of observing foothill yellow-legged frog and Sierra Nevada yellow-legged frog during pre-construction surveys. The Incidental Take Permit application was received within 2 months of observing the frogs on site.

# Jason J. Moghaddas, MS, RPF

jmoghaddas@sig-gis.com  
(530) 927-8009  
Quincy, CA



## Project Experience

Mr. Moghaddas is an experienced fire ecologist, with extensive forestry and natural resource related planning and implementation experience in the Sierra Nevada Range of California.

## Area of Expertise

- Fire Ecology
- Fuel Treatment Planning and Assessment
- Forestry

## Education

**UC Berkeley** - 1999  
MS, Environmental Science, Policy and Management (emphasis on Fire Ecology)

**Marlboro College** - 1993  
BS, Resource Management (emphasis on Wildlife Management)

## Professional Licenses

Registered Professional Forester (RPF)

- State of California, License #2774

## Locations of Experience

- United States
- Baja, Mexico
- Vietnam
- Japan

## Employment Experience

- 2010 - Present* Operations Coordinator and Research Scientist - Spatial Informatics Group, LLC, Pleasanton, CA.
- 2008 - 2012* Conservation Director - Feather River Land Trust, Quincy, CA.
- 2008 - Present* Partner - Ecosystem Management Solutions, Taylorsville, CA.
- 2004 - 2008* Fire Ecologist - Mount Hough Ranger District, Plumas National Forest, CA.
- 2001 - 2005* Staff Research Associate - Fire Science Laboratory, University of California, CA.
- 2000 - 2001* Intern Forester - University of California Center for Forestry, Georgetown, CA.
- 1999 - 2000* Environmental Services Intern - California Department of Parks & Recreation, Marin District, CA.
- 1997 - 1999* Graduate Student Instructor & Research Assistant - University of California, Berkeley, CA.
- 1996 - 1997* Wildland Firefighter - Plumas National Forest, CA.
- 1995 - 1996* Biological Science Technician and Forestry Assistant - US Forest Service, CA & MT.
- 1992 - 1993* State Parks Exotic Species Removal Volunteer - Sempervirens Fund, Santa Cruz, CA.

## Selected Projects and Reports

**California's 4th Climate Assessment: Fuel Treatment for Resilience and GHG Mitigation.** 2015-2018. For this report, SIG reviewed what is known about the effects of fuel treatments on stored forest carbon, wildfire risk and wildfire emissions in California's forests and summarized geo-spatial data gaps that need to be filled in order to make good fuel treatment decisions that both increase forest resilience and carbon sequestration. Activities Performed: lead author, literature review, preparation of report, coordination of co-authors. Client: University of California, Berkeley Energy and Climate Institute

**Assessing the Sustainability of Forest Biomass Utilization in California.** 2013- SIG worked with an Interdisciplinary Science Team to assess wildfire and carbon consequences of forest silvicultural treatments associated with hazardous fuels reduction and biomass removal in forested regions of California. Activities Performed: co-author, literature review, preparation of report, coordination of co-authors. Client: USDA Pacific Southwest Research Station.

**Assessment of fire hazard/risk in the Wildland Urban Interface (WUI) and Stream Environment Zones (SEZs).** 2011-2013. SIG completed a fire hazard and risk assessment for the entire Lake Tahoe Basin, with an analysis focused on potential fire behavior in Stream Environment Zones (SEZs) and the wildland urban interface (WUI). Activities Performed: co-author, literature review, preparation of report, coordination of co-authors. Client: USDA Pacific Southwest Research Station.



## Selected Projects and Reports (continued...)

**California Climate Initiative GHG Calculations and Collaborative Fire Risk Analysis and Mitigation for the Burney-Hat Creek Community Forest and Watershed Group.** Spatial Informatics Group completed the GHG calculations required for a CALFIREs Forest Health Program in partnership with the Fall River Resource Conservation District. This funded application covers nearly 8,000 acres fuel reduction and reforestation program in the Hat Creek Watershed, which is being planned and implemented in collaboration with the Burney-Hat Creek Community Forest and Watershed Group. As part of this effort, Conway Conservation Group (CCG) is working with Spatial Informatics Group (SIG) and 34 North to help this designated Collaborative Forest Landscape Restoration Program (CFLRP) project prioritize treatments across ownership boundaries. Using recent high density LiDAR, satellite imagery, and plot data in a robust modeling framework, important forest metrics like stand density index (SDI) were used in combination with fire intensity and probability outputs to focus the project's finite resources on areas that were at most risk to insect, disease, and high severity fire. Clients: Fall River Resource Conservation District

**California Climate Initiative GHG Calculations and Collaborative Fire Risk Analysis and Mitigation for Pitt River Watershed and Modoc County Region.** Spatial Informatics Group is working in partnership with the Pitt River Resource Conservation District to assess fire risk and identify potential fuel treatments for the Pitt River watershed in Modoc County, CA. As part of this effort, Conway Conservation Group (CCG) is working with Spatial Informatics Group (SIG) and 34 North to help prioritize treatments across ownership boundaries. Clients: Pitt River Resource Conservation District

## Selected Scientific Publications

Saah D, Robards T, Moody T, O'Neil-Dunne J, Moritz M, Hurteau M and Moghaddas J. 2012. Developing an Analytical Framework for Quantifying Greenhouse Gas Emission Reductions from Forest Fuel Treatment Projects in Placer County, California. Final Report submitted to: United States Forest Service, Pacific Southwest Research Station.

J. D. McIver, S. L. Stephens, J. K. Agee, J. Barbour, R. E. J. Boerner, C. B. Edminster, K. L. Erickson, K. L. Farris, C. J. Fettig, C. E. Fiedler, S. Haase, S. C. Hart, J. E. Keeley, E. E. Knapp, J. F. Lehmkuhl, J. J. Moghaddas, W. Orosina, K. W. Outcalt, D. W. Schwilk, C. N. Skinner, T. a. Waldrop, C. P. Weatherspoon, D. a. Yaussy, A. Youngblood, and S. Zack. 2012. Ecological effects of alternative fuel-reduction treatments: highlights of the National Fire and Fire Surrogate study (FFS). *International Journal of Wildland Fire*.

Stephens, S.L., R.E.J. Boerner, J.J. Moghaddas, E.E.Y. Moghaddas, B.M. Collins, C.B. Dow, C. Edminster, C.E. Fiedler, D.L. Fry, B. R. Hartsough, J.E. Keeley, E.E. Knapp, J.D. McIver, C.N. Skinner, and A. Youngblood. 2012. Fuel treatment impacts on estimated wildfire carbon loss from forests in Montana, Oregon, California, and Arizona. *Ecosphere* 3(5):38.

Moghaddas, J. J., Collins, B.M., Menning, K., Moghaddas, E.Y., and Stephens, S.L. 2010. Fuel Treatment Effects on Modeled Landscape Level Fire Behavior in the Northern Sierra Nevada. *Canadian Journal of Forest Research*, 40: 1751-1765

Collins, Brandon M., Scott L. Stephens, Jason J. Moghaddas, and John Battles. "Challenges and approaches in planning fuel treatments across fire-excluded forested landscapes." *Journal of Forestry* 108, no. 1 (2010): 24-31.

# Paul Lackovic

plackovic@sig-gis.com  
(530) 680-1398  
Chico, CA



## Project Experience

Paul honed his GIS skills as a GIS technician in the natural resources field before beginning a career in wildland fire in 2012. As an NWCG qualified Geographic Information Systems Specialist (GISS) Paul has provided GISS support to Federal and State Incident Management teams on over 40 major wildland fires across California and the South West. He brings with him an extensive knowledge of incident GIS and wildland fire operations.

## Education

**State University of New York, Geneseo** - 1997  
B.A. Geography & Political Science

## Certifications

National Wildfire Coordinating Group GIS Specialist (GISS) with experience on over 40 major forest fires.

## Area of Expertise

- ArcMap
- Spatial Analyst
- 3D Analyst
- Network Analyst
- ArcGIS Online
- Collector
- Operations Dashboard
- IFTDSS
- Qgis
- Google Earth
- Adobe Acrobat, Photoshop, and Illustrator
- Microsoft Office
- DNR GPS
- Data acquisition
- Cartographic design
- Large format printing

## Employment Experience

- 2021 - Present* Geospatial Analyst – Spatial Informatics Group, LLC, Pleasanton, CA.
- 2012 - 2021* GIS Manager - Deer Creek Resources
- 2005 - 2009* GIS Specialist - Foothill Associates
- 2004 - 2005* GIS Specialist - Jack Schreder and Associates
- 2003 - 2004* Range Control Specialist - Parsons
- 2002 - 2003* Administrative Assistant, Health and Safety - Parsons

## Selected Projects and Reports

**Pyregence Consortium. 2019-2024.** The Pyregence Consortium aims to provide free and open source access to operational and strategic wildfire information based on the next generation of wildfire models. At an operational level, the consortium implements best practice science and technology to forecast wildfire activity for electric utilities. At a strategic level, wildfire scenario analyses will be produced to inform future wildfire risk and California's 5th Climate Change Assessment. The 'open source' collaboration brings together initiatives and leading researchers from 18 institutions representing industry, academia, and government in an effort to transform how wildfire mitigation and adaptation measures are implemented across the State.

**Mammoth Coordination Project. 2020.** The 55,000-acre Eastern Sierra Climate & Communities Resilience Project (ESCCRP) seeks to build resilience to catastrophic wildfire impacts in and around the mountain community of Mammoth Lakes, CA and restore ecosystem health through increased pace and scale of science-based forest restoration treatments. SIG was hired to assist with ESCCRP because of their science and operational based experience and expertise in land restoration and maintenance.



# Taro Pusina

tpusina@sig-gis.com  
(760) 937-3892  
Bishop, CA



## Project Experience

Interagency Fire Chief with over 26 years of experience in structural, wild and prescribed fire management including preparedness, prevention and aggressive suppression; multiple objective/resource benefit fire management; prescribed fire, mechanical and timber fuels treatments; with a Bachelor Degree of Science in natural resources and forestry.

## Education

**U.C. Berkeley** - 1992  
B.S., Natural Resources and Forestry

**Laney Community College** - 1989  
Associates Degree of Science

**Merritt Community College** - 1989  
Associate Degree of Arts

## Qualifications and Training

California Class B Commercial Driver Licence and M1 Motorcycle License

Fire Behavior Analyst on Central Sierra Type 2 Incident Management Team

Contracting Officer's Representative (less currency)

## Employment Experience

- 2021 - Present** Wildfire and Fuels Reduction Project Manager - Spatial Informatics Group LLC
- 2016 - 2021** Interagency Forest Fire Management Officer, GS-0301-13 - Inyo National Forest (Interagency with BLM Bishop Field Office), Bishop, CA
- 2020** Assistant Director (R5 FAM), North Operations, GS-0301-13 (120-day detail) - Northern CA Operations Center, Redding, CA
- 2015 - 2016** Deputy Interagency Fire Management Officer, GS-0401-12 - BLM Field Station / Inyo National Forest, Bishop, CA
- 2015** Deputy Fire Management Officer, Fuels, GS-0401-11 - Yosemite National Park, Yosemite, CA
- 2015** Deputy Interagency Fire Management Officer, GS-0401-12 (120-day detail) - BLM Field Station / Inyo National Forest, Bishop, CA
- 2010 - 2015** Deputy Fire Management Officer, Fuels, GS-0401-11 - Yosemite National Park, Yosemite, CA
- 2004 - 2010** Battalion Chief, Fuels, GS-0401-09 - Yosemite National Park, Yosemite, CA
- 1998 - 2004** Captain Wildland Fire Module, GS-0462-07 - Yosemite National Park, Yosemite, CA
- 1998** Tree Faller and Climber, WG-07 - Yosemite National Park, Yosemite, CA
- 1993 - 1998** Assistant Captain Wildland Fire Module, GS-0462-04/06 - Yosemite National Park, Yosemite, CA
- 1992 - 1993** Assistant Forester, Timber Cruiser - Mason, Bruce & Girard Consulting Foresters, Portland, OR

## NWCG IQCS Qualifications

- ICT3 Incident Commander Type 3
- RXB1 Prescribed Fire Burn Boss Type 1
- DIVS Division Group Supervisor
- FBAN Fire Behavior Analyst
- SOPL Strategic Operational Planner
- FIRB Firing Boss, Single Resource
- GISS Geographic Information System Specialist
- FOBS Field Observer
- FALC/FAL1 Faller Class C
- FFT2 NPS Structural Firefighter (less currency)
- FEMO Fire Effects Monitor
- ENGB Engine Boss, Single Resource

**RESUME & CURRICULUM VITAE - RICK A. SWEITZER**

Wildlife Ecologist/NEPA Compliance

The Great Basin Institute, Reno, Nevada

Phone 701-740-5787, email: [rsweitzer@thegreatbasininstitute.org](mailto:rsweitzer@thegreatbasininstitute.org)**EDUCATION:**

Ph.D. Ecology, Evolution &amp; Conservation Biology, University of Nevada, Reno, December 1995

M.S. Wildlife Ecology, University of Nevada, Reno, December 1990

B.S. Biology &amp; Environmental Science, Northern Arizona University, May 1985

**PROFESSIONAL EXPERIENCE/POSITIONS**

Great Basin Institute, Reno, NV, Wildlife Ecologist, NEPA Compliance, March 2021 to present

Great Basin Institute, Reno, NV, Wildlife Research Associate, July 2013 to Dec 2015

University of California, Berkeley, Associate Professor/Research Professional, June 2009 to June 2013

University of California, Berkeley, SNAMP Fisher Project Scientist, Aug 2007 to June 2013

University of North Dakota, Assistant, Associate Professor of Wildlife Biology, Aug 1998 to Dec 2009

University of California, Davis, Postgraduate Research Scientist, Jan 1994 to Aug 1998

Institute of Arctic Biology, Fairbanks, Research Associate, Aug 1996 to Aug 1998

University of Alaska, Fairbanks, Visiting Assistant Professor, Aug 1996 to May 1997

**NEPA COMPLIANCE ACTIVITIES**

- Sequoia National Forest Castle Fire Hazard Tree Hazard Tree Mitigation Project, May 2021; Biological Assessment, Biological Evaluation, Management Indicator Species Report and Migratory Bird Report
- Kings Canyon National Park and Sequoia National Forest Interagency Biological Assessment for Prescribed Fire Actions, Sept 2021
- Kings Canyon National Park Big Stump East Fuel Reduction Actions with Pacific Fisher Effects Analysis for USFWS Sect 7 Review, September 2021
- Sequoia National Park Mineral King Road Reconstruction Project with Fisher Effects Analysis for USFWS Sect 7 Review, October 2021

**SELECTED MAJOR RESEARCH PROJECTS**

- Ecology and management of Pacific fishers in managed forest ecosystems
- Population biology and effects of mule deer on oak woodlands, Santa Catalina Island, California
- Economic and ecological risk assessment of expanding wild pigs in California
- Ecological effects of wild pigs on oak woodland ecosystems in California
- Influence of fire and large mammal herbivory on the population ecology of black-tailed prairie dogs
- Predator-prey relations of mountain lions, wild pigs, and deer in California
- Ecological implications and population ecology of bison on Santa Catalina Island, California
- Terrestrial vertebrate diversity in mixed- and tallgrass prairies of North Dakota
- Population and disease ecology of moose in the northern Great Plains
- Climate change and land use effects on small mammal communities in the northern Great Plains

**SELECTED PROFESSIONAL PUBLICATIONS (15 selected out of 53):**

**Sweitzer, R. A.**, B. F. Furnas, R. H. Barrett, K. L. Purcell, and C.M. Thompson. 2016. Landscape Fuel Reduction, Forest Fire, and Biophysical Linkages to Local Habitat Use and Local Persistence of Fishers (*Pekania pennanti*) in Sierra Nevada Mixed-conifer Forests. *Forest Ecology Management* 361: 208-225.

- Sweitzer, R. A.**, V. D. Popescu, R. H. Barrett, C. M. Thompson, K. L. Purcell, G.M. Wengert, M.W. Gabriel, and L.W. Woods. 2016. Mortality Risks and Limits to Population Growth of Fishers in California. *Journal of Wildlife Management* 80: 438-451, DOI: 10.1002/jwmg.1020
- Sweitzer, R. A.**, V. D. Popescu, R. H. Barrett, K. L. Purcell, and C. M. Thompson. 2015. Reproduction, abundance, and population growth for a fisher population (*Pekania pennanti*) in the Sierra National Forest, California. *Journal of Mammalogy* 96: 772-790.
- Popescu, V.D., P. de Valpine, and **R. A. Sweitzer**. 2014. Testing and consistency of wildlife data types before combining them: the case of camera traps and telemetry. *Ecology and Evolution* 4:933-943.
- Thompson, C., **R. A. Sweitzer**, M. Gabriel, K. Purcell, R. Barrett, and R. Poppenga. 2013. Impacts of rodenticide and insecticide toxicants from marijuana cultivation sites of fisher survival rates in the Sierra National Forest, California. *Conservation Letters*, 6:1-12.
- Sweitzer, R. A.**, and D. H. Van Vuren. 2008. Effects of wild pigs on seedling survival in California oak woodlands. Pp 267-277 in *Proceedings of the 6<sup>th</sup> California oak symposium: today's challenges, tomorrow's opportunities* (peer-reviewed) (Merenlender, A., D. McCreary, and K.L. Purcell, Tech. eds.) General Technical Report PSW-GTR-217. Albany California: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 677 p.
- Tabak, M. A., A. J. A. J. Piaggio, R. S. Miller, **R. A. Sweitzer**, H. B. Ernest. 2017. Anthropogenic factors predict movement of an invasive species. *Ecosphere* 8: 1-13.
- McCann, B. E., B. S. Schmit, T. J. Smyser, R. A. Newman, A. J. Piaggio, M. J. Malek, S. R. Swafford, **R. A. Sweitzer**, and R. B. Simmons. 2018. Molecular Population Structure for Feral Swine in the United States. *Journal of Wildlife Management* 82:821-832.
- Milne-Laux, S., and **R. A. Sweitzer**. 2006. Experimentally-induced colony expansion by black-tailed prairie dogs (*Cynomys ludovicianus*) and implications for conservation. *Journal of Mammalogy* 87:296-303.
- Long, E. S., **R. A. Sweitzer**, D. R. Diefenbach, and M. Ben-David. 2005. Controlling for anthropogenically induced atmospheric variation in stable carbon isotope studies. *Oecologia* 146:148-156.
- Constible, J. M., **R. A. Sweitzer**, D. H. Van Vuren. P.T. Schuyler, and D.A. Knapp. 2005. Differential dispersal of non-native plants by introduced bison in an island ecosystem. *Biological Invasions* 7:699-709.
- Sweitzer, R. A.**, I.A.Gardner, D. Van Vuren, W.M. Boyce, and J.D. Waithman. 2000. Estimating sizes of wild pig populations in the North and Central Coast regions of California. *Journal of Wildlife Management* 64 (2):531-543.
- Sweitzer, R. A.**, S.H. Jenkins, and J. Berger. 1997. The near-extinction of porcupines by mountain lions and consequences of ecosystem change in the Great Basin Desert. *Conservation Biology* 11:1407-1417.
- Atwill, E.R., **R.A. Sweitzer**, M.G. Pereira, I.A. Gardner, D. Van Vuren, and W.M. Boyce. 1997. Prevalence of and associated risk factors for shedding *Cryptosporidium parvum* and *Giardia* cysts within feral pig populations in California. *Applied and Environmental Microbiology* 63:3946-3949.
- Sweitzer, R. A.**, and J. Berger. 1992. Size-related effects of predation on habitat use and behavior in porcupines (*Erethizon dorsatum*). *Ecology* 73(3):867-875. Effects of Wild Pigs on Seedling Survival in California Oak Woodlands.

#### SELECTED MAJOR REPORTS

- Sweitzer, R.A., and J. Umek.** Eastern Sierra Nevada Riparian Areas Assessment for Fuels Reduction Actions. Completed January 2022, 163 pages.
- Sweitzer, R. A.**, and T. Manuwal. 2008. Ecological Implications and Management of Introduced Mule Deer on Santa Catalina Island, California. Final Report to Catalina Island Conservancy, June 2008, 111 pages.
- Sweitzer, R. A.**, and A. R. Grinde. 2007. Assessment and Recovery of Vascular Plant Communities at Pinnacles National Monument, California. Final Report to National Park Service, 56 pages.
- Sweitzer, R. A.**, J. M. Constible, and D. H. Van Vuren. 2003. Population ecology and ecological effects of bison on Santa Catalina Island, California. Final Report Santa Catalina Conservancy.
- Sweitzer, R. A.** 2001. Small mammals of Lostwood, Des Lacs, and J. Clark Salyer National Wildlife Refuges, North Dakota. Final Report submitted to U.S. Fish and Wildlife Service. Documents and tables 144 pages.

**PROFESSIONAL SERVICE**

Associate Editor, American Society of Mammalogists – Journal of Mammalogy (2006-2008). Recent reviewer for *Oecologia*, *Quarterly Review of Biology*, *Ecography*, *Journal of Wildlife Management*, *Conservation Biology*, *Ecology*, *Journal of Mammalogy*, *Environmental Management*, *Wildlife Research*

**ABILITY AND EXPERIENCE COMMUNICATING IN WRITING.**

- I have extensive experience communicating in writing, which includes over 50 articles in peer-reviewed scientific journals or proceedings, as well as 11 major research reports or management planning documents prepared for state, federal, or nongovernmental agencies/organizations that contributed funding for a variety of independent wildlife-focused research projects I conducted from 1988 to 2015.
- I also served as an Associate Editor for the *Journal of Mammalogy* from 2004 to 2007. The *Journal of Mammalogy* is an international scientific journal, and I was directly responsible for organizing peer-reviews for articles that were submitted to the *Journal* for potential publication, considered reviewer comments, and made recommendations on whether the articles merited publication in the journal.

**PROFESSIONAL WILDLIFE ECOLOGY/CONSERVATION PROJECTS (DETAILED)**

- Planned and completed two different major studies of wild pigs in California. For these studies I developed and directly implemented multiple different survey protocols including camera traps for large mammals, seedling belt transects, vegetation plots for plant species diversity (point-intercept sampling), small mammal grid trapping, coverboard transects (amphibs/reptiles), time-constrained searches (amphibs/reptiles), pitfall trap sampling (shrews, small mammals, reptiles, amphibians)
- Planned and completed a multi-year research project examining the impacts of nonnative bison on the grasslands, woodlands and riparian habitats of an offshore island in California, Santa Catalina Island. My research team and I used a diverse array of methods (fenced exclosures, biomass sampling, transects, sampling for species diversity/richness in vegetation plots, etc.) to estimate forage use and habitat carrying capacity for bison on Santa Catalina Island, California. We designed methods to directly estimate habitat carrying capacity for bison across the entire island, using concepts and methods derived from livestock grazing principles (allowable use metrics, estimated annual production for grassland systems, species-specific diet data, estimates of annual forage intake by bison). These data were used to predict island-wide carrying capacity for bison under different ecological circumstances (drought, non-drought conditions). From these and other derived data, I developed a long term management plan for bison on Santa Catalina Island, which has since been used to reduce and then maintain a smaller number of bison on this island to minimize negative impacts of bison on native plants and animals.
- Planned and completed a multi-year research project examining the ecological implications of introduced mule deer on an offshore island in California, Santa Catalina Island. My research team and I used a diverse array of methods (GPS and VHF radiotelemetry, spotlight surveys, distance sampling along transects, experimental seedling plots, fecal diet analyses, population modeling, fenced exclosures, biomass sampling, sampling for species diversity/richness in vegetation plots, etc., transects to estimate browse use and browse impacts on endemic trees/shrubs. From these and other derived data, we developed a long term management plan for mule deer on Santa Catalina Island
- As part of an effort by the National Park Service at Pinnacles National Monument, in central California to protect native plant, riparian, and oak woodland habitats from nonnative wild pigs from, I designed and initiated detailed methodologies (e.g. protocols) for monitoring the recovery of plant communities in support of the lethal removal (eradication) of wild pigs from Pinnacles National Monument. We established multiple, replicated permanent plots and transects within riparian, grassland and woodland habitats where standardized procedures were designed and used to monitor changes in and recovery of

plant communities subsequent to the lethal removal of wild pigs from the national monument.

Procedures/Methods included soil disturbance plots randomly placed along transects, seedling counts within fixed plots along belt transects, and plant community sampling for species richness/diversity from point-intercepts along linear transects

- Planned and completed an 8 year research project examining how Pacific fishers respond to fuels reduction treatments on national forest lands in California (Sierra National Forest). As Lead Scientist for the Fisher Team for the University of California Sierra Nevada Adaptive Management Project (SNAMP) from August 2007 to April 2013. I directly planned, developed, and implemented a large scale research project on the Pacific fisher in the Sierra Nevada mountains of central California. The major and primary goal of this 7 year research program was to assess how the Pacific fisher was responding to fuels reduction treatments in the Sierra Nevada. My research team and I collected detailed data on multiple aspects of habitat use and the population biology of fishers in areas with various types and extents of fuel reduction treatments. I developed multiple different protocols for this project including for fixed-wing aerial radiotelemetry, camera trap surveys, denning habitat vegetation sampling, etc.

#### **EXPERIENCE COORDINATING WITH OTHER RESOURCE DISCIPLINES FOR PLANNING AND ENVIRONMENTAL DOCUMENTS**

I have direct experience in NEPA Compliance from preparing Biological Assessments, Biological Evaluations, Migratory Bird Reports, and Management Indicator Species Reports for major federal agency activities on federal lands involving Hazard Tree Mitigation, Fuels Reduction, Road Reconstruction, and Eastern Sierra Nevada Riparian Areas for Fuels Reduction: Completed January 2022

- Prescribed Fire (Sequoia National Forest, California, Sequoia and Kings Canyon National Parks, California)
- I have direct experience coordinating with other resource disciplines from serving as the Lead Scientist for the “Fisher Team” for the University of California Sierra Nevada Adaptive Management Project from August 2007 to April 2013. The “SNAMP” study (<http://snamp.cnr.berkeley.edu/about/index.html>) involved coordinated research on water resources, fire and forest ecosystem health, two species of threatened wildlife (Pacific fisher, California spotted owl), and public participation. I planned and implemented research on how the Pacific fisher was responding to fuels reduction treatments in coordination with various scientists and managers involved with the larger research effort. Information was shared, and reported, during periodic teleconferences, and via quarterly reports. Cross team coordination was facilitated during annual meetings of the “Science Team”, when Lead Scientists presented detailed overviews of their progress towards the understanding the real and potential impacts of fuels reduction treatments on each resource.
- As the Lead Scientist/Principal Investigator for research conducted on nonnative bison and mule deer on Santa Catalina Island, I regularly reported on and coordinated work on each research project to scientists/management personal with the Catalina Island Conservancy, a private NGO charged with managing the natural resources on Santa Catalina Island (<https://www.catalinaconservancy.org/index.php>).
- I was a member and subject matter expert for the Region 5 U.S.D.A. Forest Service Fisher Technical team from 2012 to 2015. As part of the Fisher Technical Team, we held regular meetings and conference calls to share scientific information derived from research on Pacific fishers in the southern Sierra Nevada region of California. I contributed data, insights and writing for different portions for the “Southern Sierra Nevada Fisher Conservation assessment” completed in January 2015.

## Attachment A

**SEAN M. SIMPSON, M.A., RPA**  
**MESA FIELD SERVICES**  
**P.O. BOX 51252**  
**SPARKS, NV 89435**  
**(775) 247-1124**  
**SIMPSON@MESAFIELDSERVICES.COM**

### **Education:**

University of Nevada, Reno: M.A. Anthropology/Archaeology 2010

Sonoma State University, California: B.A. Anthropology 1993

### **Employment History:**

Mesa Field Services – Sparks, Nevada, 1997 to present, Principle Investigator

Summit Envirosolutions, Inc. – Reno, Nevada, 2011 to 2012, Crew Member

BonTerra Consulting – Irvine, California, 2011, Crew Member

Chambers Group Inc. – Reno, Nevada, 2010 to 2011, Crew Chief

University of Nevada – Reno, Nevada, 2006, Sundance Archaeological Research Fund, Crew Member

TRC Companies – Albuquerque, New Mexico, 1998 to 1999, Field Director

Parsons Brinkerhoff, Inc. – Albuquerque, New Mexico, 1998, Crew Member

Rio Grande Consultants – Albuquerque, New Mexico, 1996 to 1998, Crew Member

Lone Mountain Archaeological Services, Inc. – Albuquerque, New Mexico, 1995 to 1996, Field Director

Mariah Associates – Laramie, Wyoming, 1994, Crew Member

Archaeological Consulting Service of Tempe – Tempe, Arizona, 1993 and 1994, Field Archaeologist

Kinlani Archaeology, Ltd. – Flagstaff, Arizona, 1993, Field Technician

Northland Research – Yuma, Arizona, 1993, Crew Member

National Forest Service – Seasonal with the Modoc and Sequoia of California and Malheur in Oregon, 1990 to 1992, Archaeological Technician

Anthropological Studies Center, Sonoma State University – Cotati, California, 1991 to 1993, Student Assistant

**Professional Experience:****Great Basin Institute – 2015-present**

As Great Basin Institute's Senior Consulting Archeologist and has expertise in NEPA compliance inventories for mining, gas, oil and communication infrastructure on Bureau of Land Management and Forest Service public lands across California, Nevada, Washington and Oregon. Mr. Simpson has completed a variety of archaeological inventory reports for a variety of Federal agencies including the Soldier Meadows Area of Critical Environmental Concern (ACEC) in Northern Nevada, a Class III pedestrian inventory of the post-Carr Fire areas within the Whiskeytown National Recreation Area, and a survey for a habitat improvement project on the Lassen National Forest, California. Sean is currently working on a cultural report for a tree hazard removal project in response to the Castle Fire in Sequoia National Forest.

**Mesa Field Services – 2012 to present**

As a Principle Investigator, I am responsible for overseeing all aspects of company operation from marketing prospective clients to supervising all projects. In this capacity, I interact with clients and regulatory agencies daily, ensuring that all projects proceeded in a timely and efficient manner. I supervise and participate in all levels of fieldwork as well as writing and reviewing reports. The firm has completed close to 1,500 projects including large block inventories for mining related development projects on lands managed by the Bureau of Land Management and Forest Service across Nevada. Other types of projects include stormwater discharge project in Las Vegas, well pad and access surveys for oil and gas development and background records searches and proposed cell towers and collocation projects in Nevada, Washington and Oregon in addition to archaeological inventories and architectural assessments of irrigation and bridge features for the Army Corps of Engineers. The company has also completed district evaluations of historic mining districts in central and northern Nevada including Manhattan, Kinsley, Rochester, Yerington, Pine Grove, Rockland, Fairview, and Bell Mountain mining districts including the boomtown or tent city of Ludwig in the Yerington Mining District and town of Pine Grove.

A Class III Cultural Survey for the PRAANA II Washoe BESS/PSES Site Project, Washoe County, Nevada.

1.0 months Completed an archaeological reconnaissance of 400 acres in Honey Lake Basin for the proposed construction of a solar farm north of Reno, Nevada. Experience includes background research, conducting block inventory, recording historic and prehistoric sites, and writing the final report. Prehistoric sites encountered included small to large lithic scatters with tools and historic resources include can scatters and railroad related debris attributed to the construction and use of the Northern Pacific Railroad.

An Archaeological Inventory for the Las Vegas Wash Cartier Channel Project, Clark County, Nevada.

0.5 months Archaeological Inventory and Architectural Assessment for a storm water discharge project completed within North Las Vegas for the Clark County Regional Flood Control District (CCRFCFCD).

An Archaeological Inventory for the Charleston Storm Drain Project, Clark County, Nevada

1.0 month Archaeological Inventory and Architectural Assessments for a storm water discharge project completed within the city of Las Vegas for the Clark County Regional Flood Control District (CCRFCFCD).

Programmatic Agreement Among the Hawthorne Army Depot, Hawthorne, Nevada, and the Nevada State Historic Preservation Officer Regarding the Maintenance of Resources 50 Years or Older at Hawthorne Army Depot, Mineral County, Nevada

1.0 month Authored the programmatic agreement to aid the Army's Environmental Officer and the Operating Contractor with the stewardship of historic resources related to future renovations, new construction, and demolition activities on the installation.

An Archaeological Survey for the Gypsum Mine Access Road Realignment Project, Clark County, Nevada  
2.0 months Completed an archaeological inventory of 200 acres for an access road realignment project near Red Rocks just west of Las Vegas. Recorded sites include segments of the Old Spanish Trail/Mormon Road (OST/MR) Historic District (CrNV-53-4969/26CK3536), the Blue Diamond Railroad (CrNV-53-5641/26CK4441) as well as mining related resources attributed to the Blue Diamond Mine.

A Class III Cultural Resources Inventory for the Motherlode Project, Nye County, Nevada  
2.0 months Conducted an archaeological inventory totaling 400 acres and identified and recorded 14 archaeological sites including mining related properties attributed to the Telluride Mine east of Beatty.

A Class III Cultural Resources Inventory for the Rockland B2 Plan-of-Operations, Lyon County, Nevada  
2.0 months Completed an archaeological inventory for 15 proposed drill pads and staging areas for a mine exploration project on land managed by the Bridgeport Ranger District of the Humboldt-Toiyabe National Forest. Managed resources included the Rockland Townsite (04170200109), Rockland Mines (04170206462), and the Pittsburg-Dolores Mill (04170213591). Activities include an evaluation of significance of the historic mining district (04170214885) including architectural assessments of standing structures within the town of Rockland.

Hawthorne Army Depot 2017 2022 ICRMP Update

1.5 months Authored the Historic Properties Component (HPC) of the Integrated Cultural Resource Management Plan (ICRMP) a 5-year plan that serves as the Installation Commander's decision document for the conduct of cultural resources management actions that take place on the installation.

A Class III Cultural Resources Inventory for the Duck Creek Storm Water Conveyance System Project, Clark County, Nevada

1.5 months Completed an archaeological inventory for a proposed stormwater discharge system in Las Vegas Valley. Resources encountered and documented include a section of the Salt Lake Route of the Union Pacific Railroad (CrNV-53-7232/5629/26CK4429/5685) with a telegraph/telephone line that parallels the tracks and several railroad related workcamps.

A Class III Survey for the Villages at Tule Springs Roadway/Utilities Crossings and the Tufa Trail, Clark County, Nevada.

0.25 months Completed a Class I and Class III inventory for a land exchange with the National Parks Service for a network of developed trails within the Eglinton Preserve area of the Tule Springs Fossil Beds National Monument. The survey resulted in the recordation of several historic roads and small prehistoric lithic scatters.

A Class III Cultural Resource inventory for the Quito Mineral Exploration Project, Lander County, Nevada.

2.0 months Completed an archaeological inventory for 40 drill sites and a laydown yard on the slopes of the Toiyabe Range near North Toiyabe Peak. Recorded Resources included a transportation feature or road and an arboglyph.



A Class III archaeological inventory for an exploration/expansion drill program for the Bell Mountain Property in Churchill County, Nevada.

7.0 months Conducted an archaeological inventory totaling 4,000 acres for a mine exploration and development project. A total of 85 sites were identified including a Paleoarchaic site and the original workings of the Bell Mountain Mine.

A Class III archaeological inventory for the Proposed Neptune Federal 33-20 Well and Access Road, Eureka County, Nevada.

1.0 month Completed an archaeological inventory for a proposed well pad and recorded several small historic artifact scatters.

Archaeological Inventory and Architectural Assessments for 22 different Proposed Cell Towers across Northern Nevada.

3.0 months I conducted all duties associated with the review of viewsheds within a half-mile radius of potential historic sites recommended for listing or listed on the National Register of Historic Places. Activities included a literature review of existing sites listed on the registers and inspecting the location of the proposed activity for additional cultural properties that may be adversely affected by proposed undertakings.

A Class III Cultural Resource Inventory for the Proposed Black Point East #1 APD and Access for Envy Energy, White Pine County, Nevada.

1.0 month Completed an archaeological inventory for a proposed well pad and recorded several small historic artifact scatters and segments of historic roads attributed to the agricultural period in Nevada during the early part of the 20th Century.

A Class III Cultural Resources Inventory for the Pine Grove Exploration Project, Lyon County, Nevada.

1.0 month Conducted an archaeological inventory for 31 proposed drill pads and access improvements near the historic town of Pine Grove, Nevada. The survey resulted in the recording of a segment of a wagon road extending from Pine Grove to the Wellington to Reese River Stage Route.

A Class I Literature Search for Coeur Mining Inc., Expanded Plan of Operations Boundary, Pershing County, Nevada.

3.0 months Conducted a Class I background records search for prior cultural resource projects and recorded cultural sites within the Coeur Mining expanded plan of operations (PoO) boundary, including the entire Coeur Rochester claim block and a one-mile buffer

A Class III Cultural Resources Inventory of 700 Acres for the Pine Grove Mine Project, Lyon County, Nevada.

1.0 month I authored the final report for a 700 Acres survey for the Pine Grove Mine Project. Activities included conducting archival research and developing a project specific historic context for the Wilson Mining District and town of Pine Grove. Project inventory including the recordation of a wide range of mining features and related support structures associated with the town of Pine Grove.

Archaeological Survey/Monitoring for the Mariagnes 12-29 Well, Nye County, Nevada.

0.25 months Completed an archaeological inventory for a proposed well pad and access road located at the northern end of Railroad Valley Nevada near the Green Springs Ranch.

A Class III Cultural Resource Investigation for the Green Springs Seismic Survey Project, White Pine County, Nevada.

0.25 months Conducted an archaeological inventory for a seismic project located in the northern extent of Railroad Valley in White Pine County.

A Class III Cultural Resource Investigation for the Eagle Springs 72-35 and 77-35 Wells and Access, Nye County, Nevada.

1.0 month Completed an archaeological inventory for two proposed well pads located in Railroad Valley Nevada. Survey resulted in the recordation of some of the earliest oil and gas related properties in the state.

Architectural Survey: Conelly Duplex Units, Hawthorne Army Depot, Hawthorne, Mineral County, Nevada.

2.0 months Conducted an architectural survey and coauthored the report for the demolishing of the Conelly Duplex Units built in 1969 in support of the Vietnam Conflict and designed by the U.S. Navy Bureau of Yards & Docks and example of Wherry and Capehart military housing programs.

Class III Archaeological Inventory for two Proposed Alternative Mining Haul Roads, Lyon County, Nevada.

3.0 months Completed a survey and wrote the final report resulting in the recordation of five new historic sites including the Morningstar Camp (CrNV-03-9465) the first major camp attributed to the copper boom of the Yerington Mining District in 1906.

Cultural Resource Report for the Truckee Carson Irrigation District Hydroelectric Project, Fallon, Nevada

1.0 month The Truckee Carson Irrigation District proposed to install two small hydroelectric plants within the district in Fallon, Nevada. This experience included the archaeological inventory and architectural assessment of concrete gate structures on the V-Line and A-Line canals constructed during the Newlands Irrigation Project.

Inventory for the Cottonwood Creek Bridge Replacement Project, Elko County, Nevada.

1.0 month Conducted an archaeological reconnaissance on behalf of the Elko County Road Department for the replacement of the Cottonwood Creek Bridge along County Road (CR) 753 in Elko, County, Nevada. Conducted an architectural assessment of the historic bridge and developed a local context for its evaluation of significance.

Cultural Resource Inventory of 1,000 Acres within the Soldier Meadow Area of Critical Environmental Concern, Humboldt County, Nevada

1.5 months In partnership with the Great basin Institute (GBI) I wrote the report including developing a local context for evaluation of recorded sites for a large block inventory conducted within Soldier Meadow Area of Critical Environmental Concern.

Survey and Monitoring of Five Crosby Buckwheat Transplant Sites, Winnemucca, Nevada

0.25 months Conducted a Class III archaeological inventory of 13 acres and monitored activities for one hundred and thirty plants from the Hycroft Mine expansion that were transplanted at four transplant sites within the Emigrant Trails National Conservation Area (NCA).

Klamath Drainage District's West Side Water Recycling Improvement Project in Klamath Falls, Oregon

1.0 month Conducted an inventory and architectural assessment of culverts constructed as part of the initial Bureau of Reclamation's Klamath Project.

## Proposed Cell Tower Project near Nyssa, Oregon.

0.25 months Conducted a cultural resources records search and site visit for T-Mobile US Cellular's Location SL02161A at 440 Columbia Avenue, Nyssa, Oregon. In addition to a field inspection of the direct APE a background literature search of significant cultural properties was conducted to determine the effects of the proposed undertaking on the viewshed or indirect APE on significant cultural properties within a half mile of the candidate location.

## Cultural Resource Report for the Truckee Carson Irrigation District Hydroelectric Project, Fallon, Nevada

1.0 months The Truckee Carson Irrigation District proposed to install two small hydroelectric plants within the district in Fallon, Nevada. This experience included the archaeological inventory and architectural assessment of concrete gate structures on the V-Line and A-Line canals constructed during the Newlands Irrigation Project.

## Inventory for the Cottonwood Creek Bridge Replacement Project.

1.0 month Conducted an archaeological reconnaissance on behalf of the Elko County Road Department for the replacement of the Cottonwood Creek Bridge along County Road (CR) 753 in Elko, County, Nevada. Conducted an architectural assessment of the historic bridge and developed a local context for its evaluation of significance.

## Cultural Resource Inventory of 1,000 Acres within the Soldier Meadow Area of Critical Environmental Concern, Humboldt County, Nevada

1.5 months In partnership with the Great basin Institute (GBI) I wrote the report including developing a local context for evaluation of recorded sites for a large block inventory conducted within Soldier Meadow Area of Critical Environmental Concern.

## Survey and Monitoring of Five Crosby Buckwheat Transplant Sites for the Hycroft Mine Expansion

1.0 month Updated and evaluated the Rainbow Clay Mine in the Rabbithole Mining District, Pershing County, Nevada.

## Pole Canyon-Franklin River Culvert Replacement Project, Elko County, Nevada.

1.0 month Conducted a small archaeological inventory and architectural assessment of the Pole Canyon-Franklin River Culvert. The project included the development of a local context for evaluation with for the project located in the northern end of Ruby Valley.

## Archaeological Survey for Proposed Exploration Activities for Mine Aggregate Materials at the Lockwood CC677 Allotment, Washoe County, Nevada

1.0 month Completed an archaeological inventory on Indian Trust Land administration by the Bureau of Indian Affairs for a proposed gravel pit expansion project and wrote report.

## U.S. Corps of Engineers – Truckee Meadows Flood Control Project.

0.5 months Wrote the cultural and Indian Trust Land sections of the Environmental Impact Statement for the Truckee Meadows Flood Control Project. Project was conducted for the U.S. Army Corps of Engineers.

## A Class III Archaeological Inventory for the White Caps Gold Mining Company's Manhattan Millsite Project, Nye County, Nevada.

3.0 months Wrote the final report including context development and eligibility determinations for the majority of the hard rock producing mines within the Historic Manhattan Mining District (26NY3975/CrNV-06-362).

A Class III Cultural Resource Survey of 44 acres for the Saddler Brown Exploration, Eureka County, Nevada.

0.5 months Conducted a block survey and wrote the report for a proposed materials test pit project in Diamond Valley, Eureka, Nevada.

A Class III Cultural Resource Survey for a Temporary Surface Water Line to Service the Saddler Brown Materials Pit, Eureka County, Nevada.

0.5 months Wrote the final report including context development and background research on the Sulphur Springs Pony Express Relay Station. The project resulted in the identification of a “palisade” cabin architectural style used across the northern Great Basin during the early historic period.

A Class III Cultural Resource Survey for the Griffon Project, White Pine County, Nevada.

1.5 months Directed a crew of four and wrote the final report for an approximate 900-acre block survey for a proposed mine exploration project on land administered by the Humboldt-Toiyabe National Forest in the White Pine Mountains. Cultural resources encountered include Paleoarchaic and Archaic materials.

A Cultural Resource Survey for the Kinsley Mountain Mine Project, Elko County, Nevada.

4.0 months Directed a crew of four during an approximately 2,800-acre survey for a proposed mine project on Kinsley Mountain and wrote the report. Historic resources encountered include can scatters associated with sheep herding and mining related features including an intact cabin, two tent flats, prospects, and a mine shaft and adit features. Prehistoric resources include quarry sites and a moderate lithic scatter with Intermountain Brownware.

A Class III Cultural Resource Survey for the Proposed Eblana Well No. 2 and Access, Nye County, Nevada.

0.50 months Conducted an archaeological inventory for a proposed well and approximately one mile of access. Recorded a historic two-track road and a small multicomponent site consisting of a light scatter of lithics and historic cans.

Proposed Cell Tower Project near Chalk Bluff, Reno, Nevada.

0.25 months Conducted a cultural resources records search, site visit, and viewshed analysis of significant historic properties within one half mile of the proposed undertaking for T-Mobile USA’s Candidate SC64302-A (7th Day Adventist) 7125 West 4th Street, Reno, Washoe County, Nevada. Also recorded the historic Ore Ditch (26Wa5234) in close proximity to the proposed tower location.

#### **Summit Envirosolutions Inc., – September 2011 to February 2012**

5.0 months As a crew member I participate in a variety of large-scale archaeological inventories in northeastern Nevada for the mining industry in the Ely and Elko areas. Duties included most aspects of site recording such as analyzing and recording artifacts, organizing paper work, taking digital photos, etc. Most of the cultural resources I encountered were late 19th century mining camps and mines.

#### **BonTerra Consulting – December 2011**

0.5 months Served as a crew member for a test excavation project of late prehistoric fishing sites in Owens Lake, California. Duties included excavating test units and collecting artifacts, taking field notes and organizing paperwork.

#### **Chambers Group Inc., Reno Nevada – May 2010 to June 2011**

Experience gained at Chambers Group as a crew chief includes participating in and supervising a variety of small and large-scale archaeological inventory projects throughout Nevada and northern Arizona, primarily for the mining industry. Additional experience gained includes completing IMACS site forms and Arizona site cards, authoring final reports including archival research and writing regional specific cultural overviews. Historic experience includes the recordation of a wide range of mining related features throughout the state of Nevada as well as the recordation of the historic townsite of Pine Grove.

A Class III Cultural Resources Inventory of 600 Acres for the Limousine Butte Project, White Pine County, Nevada.

0.25 months Served as a crew chief for an inventory of a block area for a proposed mining project. The inventory resulted in recordation of a number of small lithic scatters and a historic can scatter site.

A Class III Cultural Resources Inventory of 700 Acres for the Pine Grove Mine Project, Lyon County, Nevada.

3.0 months Served as a field director during a Class III archaeological inventory for a proposed mining project. Experience included the recordation of the historic mining town of Pine Grove and the Wilson and Wheeler Mines in Pine Grove Canyon within the Bridgeport District of the Humboldt-Toiyabe National Forest. Field directed two crews and authored the final report including conducting archival research and developing a project specific historic context for the Wilson Mining District and town of Pine Grove. Project inventory including the recordation of a wide range of mining features and related support structures associated with the town of Pine Grove. Mining features included many prospects, adits, and mine shafts, in addition to transportation corridors.

A Class III Cultural Resource Inventory of Approximately 2,000 Acres for the "U.S. Gold Pick Project", Eureka County, Nevada.

3.0 months Performed a Class III archaeological inventory for a proposed mining project dominated by the recordation of a number of large charcoal platform and habitation sites in the Roberts Creek area of the Roberts Mountains. Field directed two crews of three to four people for 1.5 months in the field, authored the final report, and completed IMACS site forms. The majority of resources encountered were charcoal platforms and small associated habitation sites but also includes the recording of two large prehistoric quarry and habitation sites.

A Class III Cultural Resource Inventory of 225 Acres in the Snowstorm Mountains for Mineral Exploration, Elko County, Nevada.

0.25 months Served as a crew chief and supervised one other person while conducting a field inventory. Resources encountered include a moderate sized Archaic period lithic scatter.

A Class III Cultural Resource Inventory of the Fronteergold Viper Project Access Roads and Drill Pads, Elko County, Nevada.

0.5 months Conducted a field inventory and authored the draft report for a series of drill pads and access roads for a mining exploration project. Two prehistoric sites recorded included the presence of Browns Bench obsidian.

A Negative Class III Cultural Resources Inventory for the US Gold Continental Valley and Limousine Butte Project, White Pine County, Nevada.

0.25 months Served as a crew chief supervising one crew member while conducting an archaeological inventory of approximately 10 acres for a mining exploration project.

A Class III Cultural Resources Inventory of the Robb Drive Project, Washoe County, Nevada.

0.25 months Served as a crew chief and supervised one crew member during a 16-acre survey for a proposed development. The inventory resulted in the recordation of an historic road and possible spur to the north off of Henness Pass Road along the Truckee River just north of “Hunters Bridge” and “Hunter’s Hotel” identified on an 1863 GLO map.

A Class III Cultural Resources Inventory for the Nevada Wind Virginia Peak Road and Transmission Line, Washoe County, Nevada.

0.25 months Served as a crew member while conducting an archaeological inventory of approximately 6.1 miles of transmission line and 2,000 feet of roadway.

A Class III Cultural Resources Inventory of Approximately 4,800 feet of New Access Roads and Three New Drill Pads for East Tonkins Springs Mine Project, Eureka County, Nevada.

0.5 months Participated as a crew member in an archaeological inventory for a series of three proposed drilling pads with access roads for mining exploration activities. Prehistoric sites encountered and recorded.

A Class III Cultural Resources Inventory of Two Proposed Drill Sites and One Half Mile of Access Roads for the Pete Hanson Mine Project, Eureka County, Nevada.

0.5 months Participated as a crew member in an archaeological inventory for two proposed drill pad locations and access roads for mining exploration activities. Cultural resources recorded include a historic charcoal platform site with a prehistoric lithic component plus a possible rock shelter in the Roberts Mountains.

A Class III Cultural Resources Inventory for the Enel Salt Wells Geothermal Project, Churchill County, Nevada.

0.75 months Participated in a Class III cultural resource inventory of approximately 580 acres for the proposed expansion of a geothermal plant near Salt Wells, Nevada and wrote the final report. Cultural resources include prehistoric sites in sand dunes and documentation of the Pony Express and Overland Stage and Mail Route and a segment of the Fort Churchill to Sand Springs Toll Road and associated historic artifact scatters.

Kanab Creek Cultural Resource Inventory of 640 Acres, Mohave and Coconino Counties, Arizona.

1.25 months Participated as a crew member in an archaeological inventory of Kanab Creek drainage and its tributaries just south of the Kaibab Paiute Reservation for the Arizona Strip of the Bureau of Land Management and authored the final report. Resources encountered include Anasazi sites including a D-shaped Pueblo, Archaic lithic scatters and tool manufacture sites, and a historic era fence line with artifacts.

#### **University of Nevada, Reno Sundance Archaeological Research Fund – June 2006**

0.5 months Worked as a crew member while a graduate student with the University of Nevada at Reno during an archaeological reconnaissance for Paleoindian cultural material in high probability areas of Jakes Valley in eastern Nevada. Activities consisted of systematic survey with a three-person crew within the vicinity of shorelines of a prehistoric lake associated with the Paleoindian period. Cultural materials encountered include a variety of Paleoindian stem points, a Clovis point, and a crescent plus Early Archaic points and materials. The project was conducted specifically for Mark Estes’ thesis research.

#### **Mesa Field Services, Carlsbad, New Mexico – 1997 to 2005**

As a principle investigator I was responsible for overseeing all aspects of company operation from marketing prospective clients to supervising all projects. In this capacity I interacted with clients and regulatory agencies daily, ensuring that all projects proceeded in a timely and efficient manner. I supervised

and participated in all levels of fieldwork as well as writing and reviewing reports. During my eight years of employment, the company completed over 1,200 projects including twelve archaeological excavations completed on federal lands under the Archaeological Resource Protection Act (ARPA). Undertakings included a variety from small-scale archaeological surveys to large-scale inventories, as well as monitoring, excavation, historic cell tower view shed analysis, and damage assessments. The following list includes some of the large-scale and noteworthy projects that have been completed by Mesa Field Services.

Tablazon Archaeological Survey, Bernalillo, New Mexico.

1.25 months Participated in and supervised crews during a 2,000-acre block survey conducted for the Cibola National Forest. Performed pre-field research and analysis of cultural resources in the field and reviewed the final report. Cultural resources encountered include Archaic period lithic scatters with diagnostic tools and isolated Historic era homesteads including features and artifacts in the forest just east of Albuquerque, New Mexico.

Survey for a PVT Fiber Optic Line Through the Lincoln National Forest, Mayhill Ranger District, Otero and Chaves Counties, New Mexico.

0.5 months Directed and participated in an archaeological survey for a 48-mile linear corridor. Experience included quality-control field checks, ensuring thorough and accurate site documentation as well as supervising the write up of the report. Cultural resources encountered included Archaic to Late Formative plus a number of Historic era homesteads with artifacts and habitation and agricultural related features in the mountains of central New Mexico.

A Class III Cultural Resource Survey for the Abandonment of the Burlington Northern and Santa Fe Railroad South of Loving, New Mexico.

1.0 month Managed the survey and report of a railroad abandonment project. Resources encountered include a number of railroad related features and associated historic trash scatters along the route of a railroad first constructed in the 1880s in southern New Mexico.

A Cultural Resource Survey for Facility Improvements at the Lea County Regional Airport.

0.5 months An archaeological survey for airport facility improvements resulting in the inventory of a large Historic era homestead with habitation structures and a number of features and materials associated with early 20<sup>th</sup> century cattle ranching.

The Recordation of a Number of Historic Permian Basin Oil Wells and Oil Field Camps for Proposed Well Pads and Facilities.

1.5 months As a supervisor I recorded a number of abandoned Historic era oil wells for proposed well pads and facilities in the Permian Basin Oil Fields in southeastern, New Mexico. Duties include conducting prefield record searches of historic resources, well pads and oil field camps, from the early to middle 20<sup>th</sup> Century. Resources include abandoned well pads with industrial equipment as well as habitation and agricultural features associated with support camps.

Viewshed Analysis for 17 different Proposed Cell Towers Across New Mexico including Albuquerque and Las Cruces.

2.0 months I conducted all duties associated with the review of viewsheds within one mile of potential historic sites listed on both the New Mexico State Register of Cultural Properties and National Register of Historic Places. Activities included a literature review of existing sites listed on the registers and inspecting the location of the proposed activity for additional cultural properties that may be adversely affected by proposed undertakings. Inspection also involved a field check to the location of listed properties within one mile

of the proposed activity to determine whether the construction of a tower would affect the integrity of listed properties or historic districts already in state and National Registers.

Cultural Resource Survey of a Transmission Line Corridor Across Azotea Mesa, Eddy County, New Mexico.

4.0 months In addition to the survey inventory, an extensive monitoring phase of archaeological resources was completed by staff and myself during the construction phase of the project. Cultural resources encountered include an extensive collection of Archaic and Late Formative features and artifacts.

Limited Test Investigations at LA 130417, Indian Basin, Eddy County, New Mexico.

1.0 month Conducted the excavation of test units and artifact analysis in the field including mapping with a transit plus oversaw the final write up of the report. The site was deflated; therefore, no formal testing or data recovery was required. Cultural resources encountered were associated with the Archaic.

A Surface Collection and Analysis of LA 134810 in Indian Basin, Eddy County, New Mexico.

0.75 months Completed site mapping in field with a transit and supervised the surface collection, analyzed artifacts, and wrote up all aspects of the final report. The site was deflated; however, cultural resources were associated with the Archaic due to the presence of diagnostic projectile points.

A Data Recovery of Two Burned Rock Midden Sites Near Sheep Draw Canyon.

2.0 months Conducted an excavation of two Archaic period archaeological sites consisting of annular rock middens set within the Guadalupe highlands near the Pecos River Valley for the City of Carlsbad Water Department. I wrote the proposal and research design and served as principle investigator supervising the field director and up to six crew members.

A Data Recovery of Four Sites Near Dark Canyon, Eddy County, New Mexico.

4.0 months Set within an archaeological landscape, the project consisted of the excavation of a corridor for a water pipeline project for the City of Carlsbad. Cultural features excavated consisted primarily of large annular rock middens as well as several small carbon stains or hearths associated with the Middle Archaic. The project was located within the transition of two life zones including the Guadalupe highlands and the Pecos River Valley. I participated and supervised the excavation in the field and conducting lithic analysis and wrote the final report.

A Data Recovery of LA 84982, Eddy County, New Mexico.

4.0 months Completed the excavation of an Early Formative period temporary encampment site comprised of 18 simple hearth features. Radiocarbon analysis revealed the site was likely related to a single use event. I participated in excavation in the field, including mapping the site with a transit and generating the final map. I also completed the lithic analysis and catalogued artifacts for collections. As a part of the Native America consultation process, the Mescalero Apache requested an ethnographic interview for the required prehistoric and historic cultural sequence resulting in the direct addition of tribal knowledge to the interpretation process.

A Data Recovery of LA 138576, Eddy County, New Mexico.

3.0 months Conducted the excavation of an Early Formative period temporary encampment comprised of simple hearth features. I conducted all excavation activity in the field including mapping



the site and provenience data with a transit, lithic analysis, writing the final report, and curating the artifacts with the Museum of New Mexico.

The Excavation of the Tony Federal Wells, Eddy County, New Mexico.

18 months I conducted the excavation of seven temporary encampments at five proposed well pad locations. Cultural features consisted mainly of simple hearth features but also included the excavation of a Formative period midden. Initial radiocarbon analysis revealed some 7,000 years of occupation from the Early Archaic to the Late Formative periods. The analysis resulted in the delineation of temporal diagnostic simple fire hearths and an abundance of economic data in the form of macro-botanical evidence processed and analyzed by myself. The project is significant in the fact that it is one of the only excavations conducted in the region of southeastern New Mexico with an extensive archaeo-botanical record concerning subsistence of the regions inhabitants.

Heritage Resource Survey of Lake Fork Mesa, Santa Fe National Forest, Jemez Ranger District, Sandoval County, New Mexico.

1.25 months I participated in a 2,000-acre block inventory for a prescribed burn. I performed pre-field research and analysis of cultural resources, mapped archaeological resources in the field. Cultural resources encountered include both Archaic and Formative periods.

Damage Assessments of Significant Cultural Resources Adversely Effected by Unauthorized Activities, Eddy and Lea Counties, New Mexico.

6.0 month I conducted the field inspection for prehistoric sites that were adversely affected by oil spills and development projects in six instances. Additional activities included the development of research designs including level of work in assessing the loss of archaeological data used to determine the fines of proposed offenses.

### **TRC Companies, Albuquerque, New Mexico – 1998 to 1999**

As a field director and crew chief, I was responsible for a variety of tasks, both in the field and in the office. Field responsibilities included directing and supervising a variety of survey and excavation projects, including quality control and mapping excavated sites with a total station. Additional field duties involved ensuring the integrity of field data and supervising up to two crews with twelve personnel. Office responsibilities entailed report writing and editing, mapping and drafting various graphics, as well as performing or overseeing a multitude of tasks associated with bringing large-scale projects to completion. Administrative duties were conducting pre-field records searches with agencies including the state of New Mexico ARMS on line database for previously recorded sites, conducting projects, and the integration of field data in reports. Experience also included project logistics, artifact analysis, and making state and National Register recommendations.

Cibola National Forest Land Exchange Project, Sandoval and McKinley Counties, Northwestern New Mexico.

3.0 months Serving in the capacity of a field director, I supervised 12 crew members during a 14,000-acre block survey land exchange project in the Cibola National Forest, Mount Taylor Ranger District. In addition to conducting prefield records search I conducted fieldwork, supervised crew, conducted field checks of other crew's work, including GPS data, and wrote up the final report. Cultural resources encountered cover the full North American occupation from the Paleoindian to Formative periods plus the recordation of historic can scatters and a timber mill and habitation site from the early part of the 20<sup>th</sup> century.

Survey of a 3-D Seismic Prospect Grid in the Black Kettle National Grasslands, Roger Mills County, Western Oklahoma.

4.0 months I oversaw a 180-linear mile survey and authored the final report. Cultural resources encountered represent the Archaic period to the Historic era, including the remains of Dust Bowl era abandoned homesteads with habitation structures and agricultural related features.

Survey for Development on Santa Ana Reservation, Sandoval County, Northwestern New Mexico.

2.0 months I oversaw all aspects of this large-scale archaeological inventory, including the prefield records search and directing of multiple crews and authoring the final report. Archaic to Formative period cultural resources were encountered in addition to an abandoned railroad grade from the early part of the 20<sup>th</sup> century.

Highway Department Excavations, Hidalgo and Grant Counties, Southwestern New Mexico.

5.0 months I served as a crew chief during the excavation of eight prehistoric archaeological sites including Classic Mimbres associations. Field duties included the mapping of all sites with a total station and supervising crews during the excavation of units and pit houses. I also conducted the excavation of several burials.

Highway Department Surveys, Catron, Valencia, and Socorro Counties, Southwestern New Mexico.

1.0 month I conducted and directed four separate New Mexico State Highway Transportation Department (NMSHTD) right of way surveys in and around Pie Town, Magdalena, and Quemado. Duties included conducting a literature review of existing projects and historic data for generating a local cultural history, planning project logistics, conducting a field inspection, recording archaeological materials and mapping features with a handheld GPS.

Highway Department Survey, Torrance Counties, Northeastern New Mexico.

0.25 months I Supervised and performed a five-mile NMSHTD right of way survey just south of Clines Corners with similar supervisory duties described above.

#### **Parsons Brinckerhoff, Inc., Albuquerque, New Mexico – 1998**

I-40 Bypass Test Excavation Project, Sandoval County, Northwestern New Mexico.

2.0 months Serving as a crew member during a multi-site test excavation project within the Rio Puerco valley. I conducted all duties associated with a test excavation such as the excavation of exploratory units and necessary record keeping including the bagging and cataloguing of artifacts. Cultural resources encountered dated from the Archaic to Formative periods.

#### **Rio Grande Consultants, Albuquerque, New Mexico – 1996 to 1997**

AMREP Testing and Data Recovery, Sandoval County, Northwestern New Mexico.

14 months I worked on the excavation of over two dozen Archaic and Early Formative period archaeological sites as a crew member and laboratory technician. I excavated features, including Archaic structures, collected samples, and prepared site maps. Lab duties included lithic analysis and submitting collected materials for curation. Cultural resources encountered dated from the Middle Archaic to Basketmaker periods.

#### **Lone Mountain Archaeological Services, Inc., Albuquerque, New Mexico – 1995 to 1996**

As a field director and crew chief with Lone Mountain, I obtained supervisory experience both in the field and office. Field tasks consisted of conducting archaeological field inventories, directing multiple crews on such projects, and performing quality-control field checks, mostly for seismic prospect or oil and gas exploration projects. Office tasks involved permit applications, pre-field record researches and other project organization, report writing and editing, drafting, and mapping. Supervisory duties also included correspondence with clients and various administrators at the federal, state and local level.

Project work experience involved small-scale subdivision projects within the county of Santa Fe, New Mexico and large-scale seismic surveys for the oil and gas industry in southeastern New Mexico. Two other large-scale projects include a land exchange in the Tularosa Basin of south central New Mexico and a second much larger land exchange project in Clark County, Las Vegas, Nevada.

Although protection of cultural resources is rarely required on projects involving exclusively private property and funds, local level reconnaissance survey was required by the county of Santa Fe as outlined in the Santa Fe County Land Development Code. Experience with the ordinance consisted of 25 small block surveys for subdivision projects within the County of Santa Fe. Resources typically encountered involved the original homestead structural remains and artifacts. In addition to conducting a pre-field records search on potential previous recorded sites, additional record research included obtaining the original patent for relevant historic data concerning the earliest homesteaders associated with project locations.

Twenty-Five Small-Scale Archaeological Surveys in Santa Fe County, Northwestern New Mexico.

6.0 months Served as a crew chief responsible for conducting and supervising 25 surveys in fulfillment of a Santa Fe County Ordinance concerning archaeological inventories. Projects averaged 300 acres. I was responsible for conducting all aspects of the projects, including pre-field archival research of land patents, supervising field crews and completing the comprehensive report. Most projects resulted in the recordation of Historic era homesteads from the early 20<sup>th</sup> century including abandoned dwellings and ranching support structures including corrals, fence lines, old roads, etc.

Indian Basin 3-D Seismic Survey, Eddy and Lea Counties, Southeastern New Mexico.

2.0 months I served as crew chief supervising other archaeologists during a fast-paced 780-linear mile survey project and wrote and supervised the final report including NRHP eligibility recommendations. Cultural resources encountered included Archaic to Formative period sites plus Historic era oil wells and oil field related camps from the early to middle 20th century.

Forty-Niner Ridge 3-D Seismic Survey, Eddy County, Southeastern New Mexico.

2.0 months I served as an assistant field director supervising three other crews during a 340-linear mile seismic survey as well as partially authoring the final report. Cultural resources encountered include Archaic to Formative period plus Historic era oil wells and oil field related camps from the early to middle 20th century.

Phantom Banks 3-D Seismic Survey, Eddy County, Southeastern New Mexico.

3.0 months I served as a crew chief during a 400-linear mile project. Upon completion of fieldwork, I helped with report preparation. Cultural resources encountered were mainly associated with the Archaic and Formative periods but also included limited recordings of historic artifacts and oil production related features.

Blue Diamond/Arden Archaeological Project: An Archaeological Survey of 5,984 Acres in the Las Vegas Valley, Clark County, Nevada.

2.5 months Oversaw all aspects of a BLM land exchange project including pre-field research and preparation and supervision of crews of up to seven people in the field. I was responsible for all aspects of the fieldwork and logistics including recording sites, co-authoring the report, and directing the write up of the final report. Cultural resources encountered covered the Archaic period to Historic era. The project specifically involved the extensive recording of large historic properties or features associated with turn of the century railroad construction camps.

**Three Rivers Survey, Otero County, Southeastern New Mexico**

2.0 months I served as an assistant field director for a 1,000-acre block survey for a federal land exchange project on the Mescalero Apache Indian Reservation. Duties involved the supervision of multiple crews and participation of pre-field research, overall logistical planning, and co-authoring the final report. Cultural resources encountered ranged from the Archaic period to Historic era including the recordation of several mining or prospecting pits with tent flats and artifacts.

**Proposed Test Mining Survey near Austin, Nevada**

0.25 months Conducted a small scale survey of a proposed access road and staging area for test drilling. No archaeological sites encountered.

**Phantom Banks East 3-D Seismic Survey, Eddy County, Southeastern New Mexico**

2.0 months Similar to other seismic prospects I participated in, I supervised all aspects of a 200-linear mile seismic project, including the pre-field research and preparation, directing multiple field crews, and overseeing report production and co-authoring the final report. Cultural material encountered included Archaic and Formative period resources.

**Maljamar 3-D Seismic Survey, Lea County, Southeastern New Mexico**

4.0 months I directed an 800-linear mile seismic project and co-authored report. I was responsible for all logistics associated with conducting the fieldwork and supervising crews as well as report preparation. Archaic and Formative resources were encountered.

**Whitetail Canyon Survey, Otero County, Southeastern New Mexico**

0.75 months As a crew chief I participated in a 680-acre block survey on the Mescalero Apache Indian Reservation. Cultural resources encountered were primarily Archaic.

**Mariah Associates, Laramie, Wyoming – 1994**

Altamont Pipeline Project, Washakie, Hot Springs, Fremont, Sweetwater, and Lincoln Counties, Southwestern Wyoming.

4 months I served as a crew member during the testing of several sites along the Altamont pipeline in southwestern Wyoming. Duties involved the excavation of test units and complete excavation of thermal features encountered. Cultural resources encountered were Archaic to Late Prehistoric including Fremont Culture associations.

**Archaeological Consulting Service of Tempe, Arizona – 1993 to 1995**

Pima Historic Cemetery Excavation, Maricopa County, Arizona

5.0 months I served as field archaeologist during an extensive repatriation project involving the removal of a historic Pima Indian cemetery. Duties included the delineation of gravesites and the complete exhumation of remains including the cataloguing of recovered remains and artifacts for repatriation.

**Hohokom Test Excavation for the Arizona Highway Department, Prescott Valley, Arizona**

4.0 months I serving as a field archaeologist during test excavations of a pit house village in Prescott Valley just north of Phoenix, Arizona. I gained experience in delineating pit houses within trench profiles and I sorted and catalogued artifacts for collection and analysis in a laboratory setting.

**Kinlani Archaeology Ltd., Flagstaff, Arizona – 1993**

Navajo New Lands\ Excavation of Four Anasazi sites, Navajo County, Arizona

5.0 months I conducted test unit and feature excavations on Anasazi sites while serving as a field technician in the Four Corners area. I excavated midden locations and human remains as well as surveying areas around the sites. Lab work included the cataloguing and processing of artifacts for submittal to a collections facility.

**Coconino National Forest Timber Sale Unit Survey, Coconino County, Arizona**

2.0 months I served as a field technician during a block survey of a timber sale unit for the Coconino National Forest. I conducted pedestrian survey for cultural resources and recorded sites, analyzing artifacts and producing site maps with a use of a compass. Cultural resources encountered included Archaic to Late Prehistoric materials.

**Northland Research, Flagstaff, Arizona – 1993**

**Survey at the Yuma Proving Ground, Yuma County, Arizona**

2.0 months I participated in an archaeological survey for a roadway corridor on a federal military installation. My duties included inspection of the proposed project corridor, delineation of cultural resources, mapping sites with a compass, and analyzing artifacts in the field.

**Three Seasons of Employment with National Forests in California and Oregon 1990 -- 1992**

6.0 months I served as an archaeological technician with the Modoc and Sequoia National Forest in California and the Malheur National Forest in eastern Oregon. As a technician I participated in archaeological field inventories between the school year for three months each season while attending Sonoma State University. I worked principally for block survey units delineated for timber sales within the Modoc and Malheur National Forests and served one season conducting inventories and cultural resource analysis for proposed trail upgrades in wilderness areas of the Sequoia National Forest. Cultural resources encountered Archaic period and Historic era cultural materials. Approximately 3 months of experienced gained at each forest.

**Anthropological Studies Center, Sonoma State University, Rohnert Park, California – 1991 to 1992**

My archaeological experience at Sonoma State included a variety of projects involving a range of archaeological investigations across northern California. Experience was gained while serving as a volunteer, associated with academic courses, internships, and while employed by Sonoma States Anthropological Studies Center. Volunteer experience consisted of serving over the weekend as a crew member on two separate excavation projects and aiding an analysis project conducted at a collections facility on campus. This experience involved: (1) an excavation of a Forty-Niner era town in the northern Sierra Mountains near Chico; (2) a shell midden site near Fort Ross on the coast of Sonoma; and (3) speciation of shells from soil samples taken from shell middens near Fort Ross on the coast of California.

Additional experience gained was from two separate “Archaeological Field Methods” courses. The first included basic instruction conducting archaeological reconnaissance for a block survey at Sugar Loaf Ridge State Park. The other involved test excavations of prehistoric sites and the recording of architectural features associated with adobe structures from the era of General Vallejo at Rancho Olompali State Historic Park in Marin County. Additionally, as a student I participated in three separate internships designed to introduce students to the basic skills sets of different processes associated with Section 106 review. One internship involved working at the Northwest Information Center or repository of archaeological data including surveys and site data such as location and recordings. Responsibilities included organizing incoming project data in system files including archaeological site data and aiding record searches for contractors utilizing the database. The second internship was at a collections facility with duties associated with the acquisition of artifacts from excavation projects throughout northern California. The third internship involved instruction and participation in the floatation process of separating charred archaeological material from soil samples for macro-botanical analysis.

My final experience while attending Sonoma State University was employment with the Anthropological Studies Center. I participated on two separate cultural resource investigations including a block reconnaissance survey for a subdivision project in the foothills of Mount Diablo and the other, a test excavation evaluating sites for a highway improvement project in Napa Valley.

### **University of Nevada at Reno Field School Reno, Nevada – 1989**

As an undergraduate student I completed six semester units of archaeological field school in the Warner Valley area of eastern Oregon consisting of eight weeks of fulltime experience. I was instructed in a full range of archaeological skills associated with archaeological survey and excavation. Survey experience included instruction in the use of a compass, identifying site locations on a quadrangle map, how to record a site map with a compass and pacing, and conducting onsite artifact and lithic analysis. Excavation skills gained involved an introduction to unit excavations, how to take proper records such as detailed excavation notes and organizing field specimen lists of collected artifacts, and mapping sites with a transit. Further instruction included introduction to projectile point typologies and other regional Great Basin artifact types such as groundstone and crescents, and instruction in the regional historic and prehistoric background of the Great Basin.

My experience with UNR also included six weeks of volunteer excavation in Duck Flat Valley located in northwestern Nevada. The experience was related exclusively to excavation and involved the excavation of test units and a pit house within the context of a lithic quarry site. Additional experience involved mapping and compiling of data associated with the use of a transit in formulating a detailed site and excavation map with contours or topographical relief.

### **Other qualifications:**

#### **Technical Competence**

My computer proficiency includes the ability to type forty to fifty words per minute and familiarity with the complete Microsoft Office Suite with particular emphasis on Word and Excel. Additional software proficiency includes ESRI (GIS software), Surfer and SPSS. In addition to proficiency in document production and GIS related software, I am also proficient at the use of transit and total station and can generate contour maps with provenience, grid, artifact, and feature locations. I have developed my own software spread sheet designed to incorporate data generated in the field that can produce the horizontal and vertical data needed for constructing contour maps. As a result I understand the inherent errors related to angles and degrees with the ability to proof generated maps and correct errors. Also, I am familiar with Public Land Surveying System (PLSS) when delineating project area locations.

#### **Geographic Information Systems (GIS) Capability**

I have extensive experience with collecting geographic data in the field with use of handheld GPS units and the downloading of data for integration with ESRI or GIS related software programs. Specific relevant experience includes the use or integration of digital quadrangles ortho-photographs and the ability to program relevant datums and rectify digital quadrangles with either Universal Transverse Mercator (UTM) coordinate system or Decimal degrees (DD) expressed as latitude and longitude geographic coordinates.

#### **Professional Registration and Certification**

Archaeological Damage Assessment Class: Sponsored by the New Mexico State Historic Preservation Division, Albuquerque, New Mexico. Completion June 14, 2002. Instructors Martin McAllister with Archaeological Resource Investigations and Wayne Dance, Assistant District Attorney, District of Utah.

First Geoarchaeological Field Course: Southeastern New Mexico. Sponsored by Bureau of Land Management and State of New Mexico Historic Preservation Division, Santa Fe, New Mexico. Field Course Instructor Dr. Stephen A. Hall with Red Rock Geological Enterprises. Registered Professional Archaeologist.

**Major Reports:**

- 2021 A Class III Cultural Survey for the PRAANA II Washoe BESS/PSES Site Project, Washoe County, Nevada. Mesa Field Services Report No. 1493.
- 2019 *An archaeological inventory for the Charleston storm drain project, Clark County, Nevada.* City of Las Vegas, Clark County Regional Flood Control District, Las Vegas, Nevada. Mesa Field Services Report No. 1418.
- 2019 *An Archaeological Survey for the Gypsum Mine Access Road Realignment Project, Clark County, Nevada.* Submitted to the USDOJ Bureau of Land Management, Southern Nevada District, Las Vegas Field Office, Project No. CRR 5-2794(P). Mesa Field Services Report No. 1406.
- 2018 *Programmatic Agreement Among the Hawthorne Army Depot, Hawthorne, Nevada, and the Nevada State Historic Preservation Officer Regarding the Maintenance of Resources 50 Years or Older at Hawthorne Army Depot, Mineral County, Nevada.* Submitted to the Hawthorne Army Depot, Hawthorne Nevada. Mesa Field Services Report No. 1410.
- 2018 *A Class III Cultural Resources Inventory for the Motherlode Project, Nye County, Nevada.* Submitted to the USDOJ Bureau of Land Management, Battle Mountain District, Tonopah Field Office, Project No. CRR 6-3238(P). Mesa Field Services Report No. 1385.
- 2018 *A Class III Cultural Resources Inventory for the Rockland B2 Plan-of-Operations, Lyon County, Nevada.* Submitted to the Humboldt-Toiyabe National Forest, Bridgeport Ranger District, Report R2017041702658. Mesa Field Services Report No. 1377.
- 2018 *A Class III Cultural Resources Inventory for the Duck Creek Storm Water Conveyance System Project, Clark County, Nevada.* Submitted to the USDOJ Bureau of Land Management, Southern Nevada District, Las Vegas Field Office, Project No. CRR 5-2781(P). Mesa Field Services Report No. 1373.
- 2017 *Hawthorne Army Depot 2017 2022 ICRMP Update.* Submitted to the Hawthorne Army Depot, Hawthorne Nevada. Mesa Field Services Report No. 1374.
- 2017 *A Class III archaeological inventory for the Proposed Neptune Federal 33-20 Well and Access Road, Eureka County, Nevada.* Submitted to the USDOJ Bureau of Land Management, Tuscarora District, Field Office, Project No. BLM 1-3180(P). Mesa Field Services Report No. 1339.
- 2016 *An Exploration/ Expansion Drill Program for the Bell Mountain Property, Churchill County, Nevada.* Submitted to the USDOJ Bureau of Land Management, Carson City District Stillwater Field Office, Project No. CRR 3-2725(P). Mesa Field Services Report No. 1321.
- 2015 *A Class III Cultural Resources Inventory for the Pine Grove Exploration Project, Lyon County, Nevada.* Prepared for Stantec. Submitted to the Humboldt-Toiyabe National Forest, Bridgeport Ranger District, Report R2015041702467. Mesa Field Services Report No. 1210.
- 2014 *Architectural Survey: Conelly Duplex Units, Hawthorne Army Depot Hawthorne, Mineral County, Nevada.* Submitted to the Hawthorne Army Depot, Hawthorne Nevada. Mesa Field Services Report No. 1198.



- 2014 *A Class III Cultural Resources Inventory for two Alternative Mining Haul Roads, Lyon County, Nevada.* Prepared for the Art Wilson and Company. Submitted to the USDOJ Bureau of Land Management, Carson District Office, Project No. CRR 3-2689(P). Mesa Field Services Report No. 1197.
- 2014 *A Class III Cultural Resource Inventory of 1,000 acres within the Soldier Meadow Area of Critical Environmental Concern Humboldt County, Nevada.* Prepared for the Great Basin Institute (GBI). Submitted to the USDOJ Bureau of Land Management, Winnemucca District, Wells Field Office, Project No. CR2-3236(P). Mesa Field Services Report No. 1194.
- 2014 *An inventory for Klamath Drainage District's West Side Water Recycling Improvement Project, Klamath County, Oregon.* Prepared for the Klamath Drainage District. Submitted to Bureau of Reclamation, Mid-Pacific Region, Sacramento, California. Mesa Field Services Report No. 1192.
- 2013 *A Class III Cultural Resource Survey for the Kinsley Exploration Project, Elko County, Nevada.* Prepared for JBR Environmental Consultants, Inc. Submitted to USDOJ Bureau of Land Management, Elko District, Wells Field Office, Project No. BLM-6-2955(P). Mesa Field Services Report No. 1178.
- 2014 *Cultural Resource Report for the Truckee Carson Irrigation District Hydroelectric Project, Fallon, Nevada.* Prepared for Nevada Controls, LLC. Submitted to Bureau of Reclamation, Mid-Pacific Region, Sacramento, California, Project No. 13-LBAO-276. Mesa Field Services Report No. 1196.
- 2014 *A Class III Cultural Resource Survey for the Cottonwood Creek Bridge Replacement Project, Elko County, Nevada.* Prepared for JBR Environmental Consultants, Inc. Submitted to the Army Corp. of Engineers. Mesa Field Services Report No. 1195.
- 2014 *A Class III Cultural Resource Inventory of 1,000 acres within the Soldier Meadow Area of Critical Environmental Concern Humboldt County, Nevada.* Prepared for the Great Basin Institute (GBI). Submitted to Submitted to the USDOJ Bureau of Land Management, Winnemucca District, Wells Field Office, Project No. CR2-3236(P). Mesa Field Services Report No. 1194.
- 2014 *Survey and Monitoring of Five Crosby Buckwheat Transplant Sites.* Prepared for JBR Environmental Consultants, Inc. Submitted to the USDOJ Bureau of Land Management, Winnemucca District, Wells Field Office, Project No. CR2-3237(P). Mesa Field Services Report No. 1193
- 2014 *An inventory for Klamath Drainage District's West Side Water Recycling Improvement Project, Klamath County, Oregon.* Prepared for the Klamath Drainage District. Submitted to Bureau of Reclamation, Mid-Pacific Region, Sacramento, California. Mesa Field Services Report No. 1192.
- 2013 *Historical Architectural Survey for the Pole Canyon-Franklin River Culvert Replacement Project, Elko, County, Nevada.* Prepared for JBR Environmental Consultants, Inc. Submitted to USDOJ Bureau of Land Management, Elko District, Wells Field Office. Mesa Field Services Report No. 1190.
- 2013 *A Class III Cultural Resource Survey for the Kinsley Exploration Project, Elko County, Nevada.* Prepared for JBR Environmental Consultants, Inc. Submitted to USDOJ Bureau of Land Management, Elko District, Wells Field Office, Project No. BLM-6-2955(P). Mesa Field Services Report No. 1178.

- 2013 *A Class III Archaeological Inventory for the White Cap Gold Mining Company's Manhattan Millsite Project, Nye County, Nevada.* Draft Report. Prepared for White Caps Gold Mining Company. Submitted to USDOJ Bureau of Land Management, Battle Mountain District, Tonpah Field Office, Project No. BLM-6-2843(P). Mesa Field Services Report No. 1183.
- 2013 *A Class III Cultural Resource Inventory for the Griffon Project, White Pine County, Nevada.* Prepared for JBR Environmental Consultants, Inc. Submitted to the Humboldt-Toiyabe National Forest, Ely Ranger District, Report R2012041702242. Mesa Field Services Report No. 1176.
- 2012 *A Class III Cultural Resource Survey for a Temporary Surface Water Line to Service the Saddler Brown Materials Pit, Eureka County, Nevada.* Prepared for Ames Construction, Inc. Submitted to USDOJ Bureau of Land Management, Battle Mountain District, Mount Lewis Field Office, Project No. BLM-6-3068-2(P). Mesa Field Services Report No. 1184.
- 2012 *A Cultural Resource Survey for the T-Mobile US Cellular Location SL02161A at 440 Columbia Avenue, Nyssa, Oregon.* Prepared for Michael Brandman Associates. Mesa Services Report No. 1179.
- 2012 *A Class III Cultural Resource Survey for the Proposed Eblana Well No. 2 and Access, Nye County, Nevada.* Prepared for JBR. Mesa Field Services Report No. 1176.
- 2012 *A Cultural Resources Survey for the T-Mobile USA Candidate SC64302-A (Seventh Day Adventist), 7125 West 4th Street, Reno, Nevada.* Prepared for Michael Brandman Associates. Mesa Services Report No. 1175.
- 2011 *A Class III Cultural Resources Inventory of 700 Acres for the Pine Grove Mine Project, Lyon County, Nevada.* Prepared for JBR.
- 2011 *A Class III Cultural Resource Inventory of approximately 2,000 Acres for the "U.S. Gold Pick Project", Eureka County, Nevada.* Prepared for U.S. Gold Inc.
- 2010 *A Class III Cultural Resource Inventory of the Fronteergold Viper Project Access Roads and Drill Pads, Elko County, Nevada.* Prepared for Fronteergold.
- 2010 *Kanab Creek Cultural Resource Inventory of 640 acres, Mohave and Coconino Counties, Arizona.* Prepared for the Arizona Strip Office of the Arizona Bureau of Land Management.
- 2010 *A Class III Cultural Resources Inventory for the Enel Salt Wells Geothermal Project, Churchill County, Nevada.* Prepared for Enel.
- 2010 *Holocene Thermal Feature Types in Archaeological Sites of the Mescalero Sands Environment, New Mexico.* Master's Thesis University of Nevada at Reno.
- 2010 *The Excavation of the Tony Federal Wells, Eddy County, New Mexico.* Mesa Field Services Report No. 893. Prepared for MARBOB Energy Corporation.
- 2005 *A Data Recovery of LA 138576, Eddy County, New Mexico.* Mesa Field Services Report No. 796e. Prepared for MARBOB Energy Corp.
- 2004 *A Data Recovery of LA 84982, Eddy County, New Mexico.* Mesa Field Services Report No. 672. Prepared for MARBOB Energy Corp.

- 2004 *A Data Recovery of Four Sites Near Dark Canyon, Eddy County, New Mexico.* Mesa Field Services Report No. 438e. Prepared for the City of Carlsbad.
- 2003 *A Surface Collection and Analysis of LA 134810 in Indian Basin, Eddy County, New Mexico.* Mesa Field Services Report No. 517e. Prepared for Chevron Texaco and Kerr McGee.
- 2000 *Survey for a PVT Fiber Optic Line Through the Lincoln National Forest, Mayhill Ranger District, Otero and Chaves Counties, New Mexico.* Mesa Field Services Report No. 24. Prepared for Chuck Pinson, Central Valley Electric.
- 2000 *A Cultural Resource Survey of a Transmission Line Corridor Across Azotea Mesa, Eddy County, New Mexico.* Mesa Field Services Report No. 5. Prepared for Chuck Pinson of Central Valley Electric.
- 2000 *A Cultural Resource Survey of a Power Line Corridors to West Shugart 29 Federal No. 2 and West Shugart 29 Federal No. 3 Well Pads.* Mesa Field Services Report No. 21. Prepared for Chuck Pinson of Central Valley Electric.
- 2000 *Cultural Resource Survey of a Power Line Corridor to the Skelly Unit No. 902.* Mesa Field Services Report No. 22. Prepared for Chuck Pinson, Central Valley Electric.
- 1998 *Cultural Resource Inventory of the Washita 3-D Seismic Project, Roger Mills County, Oklahoma.* TRC Companies. Prepared for 3-D Geophysical, Inc., Littleton, Colorado.
- 1998 *Cultural Resource Survey of the Master Business Lease Expansion at the Pueblo of Santa Ana.* TRC Companies. Prepared for the Pueblo of Santa Ana.
- 1998 *Heritage Resource Survey of Lake Fork Mesa Santa Fe National Forest, Jemez Ranger District, Sandoval County, New Mexico.* Mesa Field Services Report No. 1. Prepared for Rita Skinner, archaeologist with the Jemez District of the Santa Fe National Forest.
- 1998 *Cibola National Forest Checker Board Land Exchange Survey.* TRC Companies. Prepared for Tom Strome of the L-Bar Ranch.
- 1996 *Blue Diamond/Arden Archaeological Project: An Archaeological Survey of 5984 Acres in the Las Vegas Valley, Clark County, Nevada.* Lone Mountain Archaeological Services Report No.077B. Prepared for Olympic Land Developers.
- 1995 *Phantom Banks 3-D Seismic Survey, Eddy County, New Mexico.* Lone Mountain Archaeological Services Report No. 047. Prepared for Capilano Seismic Corporation.
- 1995 *East Phantom Banks 3-D Seismic Survey, Eddy County, New Mexico.* Lone Mountain Archaeological Services. Prepared for Capilano Seismic Corporation.
- 1995 *Maljamar 3-D Seismic Survey, Lea County, New Mexico.* Lone Mountain Archaeological Services. Prepared for Western Geophysical.



## Whitebark Institute Staff Project Experience

Although the Whitebark Institute is a relatively new organization and has not yet taken on NEPA analysis projects, one of its staff members, Rick Kattelmann, Ph.D., has extensive experience over four decades in environmental studies similar to NEPA and CEQA analyses. Dr. Kattelmann's research with the Forest Service in the 1980s focused on the hydrologic impacts of timber harvesting. His publications on

Himalayan hydrology contributed to environmental impact analyses of hydroelectric projects in Nepal. Dr. Kattelmann was the principal hydrologist for the Sierra Nevada Ecosystem Project, a Congressionally-mandated study of the entire mountain range with an interdisciplinary team of 35 plus 100 associate members. During the three years of the SNEP, he surveyed all the major watersheds of the Sierra Nevada to have personal experience to better interpret the vast number of documents and data to be distilled. The seven chapters of the SNEP report that he wrote or contributed to summarize environmental conditions and human impacts throughout the mountain range. Dr. Kattelmann was hired by Mono County to integrate relevant portions of the SNEP report into the county's Master Environmental Assessment. He consulted for EarthJustice in a successful lawsuit that prevented design-build approaches that impacted rivers as a means of circumventing NEPA. As a sabbatical-leave substitute at Colorado State University, he taught courses about hydrologic impacts of changing land use and field techniques for evaluating watershed conditions. He was part of the small team that created the California Watershed Assessment Manual. In the eastern Sierra Nevada, Dr. Kattelmann wrote watershed assessments and plans for each of Mono County's major hydrologic basins and the regional description chapter of the Inyo-Mono Integrated Regional Water Management Plan. In 2018, as part of a consulting team, he contributed environmental information to Mono County's legal action in a CEQA case.

## Panorama's Experience in the Eastern Sierra

Panorama has extensive experience in the Eastern Sierra, extending back to our predecessor company, MHA Environmental Consulting, Inc. (MHA) permitting the Coso Geothermal Field under CEQA and NEPA and various federal and state regulations in the late 1980s and early 1990s. In the early 2000s, we started working for Inyo County Public Works, providing CEQA and NEPA compliance and permitting. We have continuously provided services in Inyo County over the last 20 years. Panorama has also provided our services in Mono County and Alpine County, including preparing a large wildfire hazard mitigation plan for the Alpine County in 2020 and 2021. Panorama is also an on-call consultant to the Mono County Planning Department to provide CEQA support for projects. **We have provided 30 project examples in the table below demonstrating our local work.** These examples show that our team understands the key concerns and issues in the Eastern Sierra region, and has provided quality, cost-effective services for more than two decades to the entities within the region. Most of these projects involved both CEQA and NEPA compliance as well as addressing biological and cultural resources. Through our experience we especially understand the cultural resources sensitivity of the region and found sometimes even the smallest projects had major, intact resources to address.

## Eastern Sierra Experience

County	NEPA	CEQA	Project	Key Technical Areas
Alpine County		X	<b>Wildfire Hazard Mitigation Plan: Fuels reduction projects to reduce the risk of wildland fire are a high priority in Alpine County and several have been undertaken or are ongoing. These include neighborhood fire breaks and larger scale fuels reduction projects on federal lands. Fuel reduction projects and priorities have also been developed in a Community Wildfire Protection Plan (CWPP) for the County. Subsequently, the County received a grant to prepare a more detailed hazard mitigation plan. Spatial Informatics Group (SIG) and Panorama were selected and are preparing the Wildfire Hazards Mitigation Plan for Alpine County. The plan includes an evaluation of fire hazard risks through modeling, identification and ranking of highly valued resources and assets (HVRAs) through a collaborative process with a steering committee. Furthermore, the plan identifies three priority projects including defining the specific fuel treatments, and defining the costs associated with those treatments. SIG prepared the modeling and analyses and Panorama led the documentation, outreach effort strategy, and the CEQA IS/MND for the project. Panorama coordinated with the USFS, who were members of the Technical Advisory Committee. Panorama conducted outreach and coordinated site visits with members of the Washoe Tribe, regarding tribal cultural resources within the</b>	<b>Wildfire, Biology, Cultural Resources</b>

Attachment A  
**PANORAMA'S EASTERN SIERRA EXPERIENCE**

			County. The plan included the modeling results and fire hazard risks, the important infrastructure and resources to be protected, and the detailed implementation plan for 12 projects.	
Alpine County	X	X	Dixon Road Bridge Replacement Permitting: Panorama's initial role was to provide construction oversight and ensure permit compliance by reviewing pre-construction plans and survey reports and monitoring compliance reports. However, the contractor suggested an alternative temporary access method that was not previously covered by the County's existing permits. Panorama guided the County through the process of revising the permit applications for the alternative temporary access method, which reduced overall impacts to wetlands and waters. Panorama reviewed the existing permits, original project plans, and proposed temporary access design to determine reduced jurisdictional impact acreages. Existing permits included the 401 Water Quality Certification, the 1600 Streambed Alteration Agreement, the 404 Nationwide Permit 14 Authorization, the USFWS Approval Letter (related to consultation for the 404 Nationwide Permit), the USFS Letter of Consent, and the USFS Minerals Permit. Panorama notified permitting agencies of the change in jurisdictional waters impacts, communicated the urgency of permit amendments, and prepared amendment applications for approval of the change in access. Panorama obtained permit amendments within 5 weeks of County notice to proceed, allowing the County to construct the bridge in one construction season.	Biology, Permitting
Alpine County	X	X	Hot Springs Road Bridge Replacement Project: Panorama is assisting the County with construction management related to implementation of CEQA, NEPA, and permit measures. Panorama is also assisting the County with amending the existing permits to reflect an alternative temporary creek crossing, which will reduce impacts to jurisdictional waters and better accommodate seasonal traffic traveling to Grover Hot Springs State Park. The construction window in Alpine County is short, due to winter weather and snow accumulation experienced at the high altitude. Panorama will coordinate closely with permitting agencies to obtain permit amendments quickly.	Biology, Recreation, Permitting
Mono County		X	Walker Basin Transaction Project: Panorama defined the water transfer program, prepared the General Plan Amendment and policies, and worked with a biological and wetland specialists to identify sensitive biological habitats and species that could be impacted by a loss of water from irrigation. Panorama's approach included initial outreach to the community, ranchers, Resource Conservation Districts, and agencies to understand concerns and participation parameters. We developed the program by defining the most likely scenarios that could occur for water transfers. The development of the program also required consideration of complex recent water case law and the jurisdiction of the State Water Resources Control Board in approving water transfers. Panorama has needed to work with the County's attorneys to understand the parameters under which the County can assert jurisdiction on the water transfer program. Our team also provided letters under AB 52 to tribal entities in the region. Panorama also quantified the amount of water available and that can be transferred based on the Conservancy's needs. Panorama is preparing the hydrologic analysis, which is complicated by the fact that there is no groundwater-surface water model available for the area. The program will involve keeping flows on the East and West Walker Rivers, which could increase flow volumes and velocity, resulting in a shortening of the fly fishing season. Panorama, with	Hydrology, Biology, Visual, Recreation (fishing)

Attachment A  
**PANORAMA'S EASTERN SIERRA EXPERIENCE**

			assistance from 2M Associates, also conducted a visual impacts analysis that is considering visual changes from transitions of wetted fields to upland habitats.	
Mono County		X	<b>June Lake Business Center:</b> Panorama prepared the project description and completed a CEQA 15183 Exemption checklist for the proposed business center and residential development at June Lake. The project included removal of existing residential structures and replacement of those structures with new two-story residential and commercial buildings. The project is located adjacent to a scenic highway and key issues included potential impacts on the viewshed due to removal of trees along the roadway. The existing structures are also more than 50 years old and required historic resource evaluation and documentation to determine whether the structures were historically significant. Panorama completed the 15183 exemption checklist and the project was approved by the County.	Aesthetics, Cultural Resources
Mono County		X	<b>Ecoshift VMT and GHG Streamlining:</b> Inyo County is updating its resource efficiency plan and developing vehicle miles traveled thresholds to streamline future greenhouse gas and traffic analysis in compliance with CEQA. Panorama is responsible for developing greenhouse gas streamlining procedures and checklists for future project applications. Panorama has been involved in review of the greenhouse gas modeling to verify it meets the CARB requirements and addresses current state policies for zero emission vehicle adoption.	Greenhouse Gases, Transportation
Mono County	X	X	<b>Topaz Lane Bridge Maintenance Project:</b> The project involved replacement of the existing bridge of Walker Creek with a new bridge upstream of Topaz Lake. The project included dewatering of a segment of the channel to install the concrete abutment. U.S. Fish and Wildlife Service and California Department of Fish and Wildlife were concerned about impacts to Lahontan cutthroat trout and Panorama worked closely with the engineer and County to develop a project solution that avoided take of the endangered fish species. Panorama also assisted the County with obtaining Section 401 and Section 1600 permits for the work within the creek.	Endangered Species, Permitting, Riparian Areas
Mono County		X	<b>Apogee Farms IS/MND:</b> Panorama is preparing the IS/MND for the Apogee Farms Project. The project includes commercial cannabis production and a specific plan to redesignate the land use and zoning for the parcel to a land use that is compatible with cannabis commercial cultivation and product handling. Panorama conducted biological and cultural resource surveys of the property and conducted air quality and greenhouse gas modeling for the project. Panorama also assisted the County in defining mitigation for project impacts.	Cultural Resources, Biological Resources, Odors, Water Supply
Mono County		X	<b>BASK Ventures:</b> Panorama prepared at 15183 exemption checklist for the Bask Ventures cannabis project, located within a business center with an existing Specific Plan and EIR. Panorama analyzed project consistency with the Specific Plan and EIR.	Aesthetics, Parking
Inyo		X	<b>Ivanpah – Control:</b> Panorama is assisting the CPUC with preparation of an EIR for Southern California Edison's proposed rebuild of the Ivanpah – Control transmission line. The line runs from Control Substation near Bishop to Kern County within Inyo County along the 395 corridor. Panorama has assisted the CPUC with	Cultural Resources, Tribal

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			outreach to Native Americans under AB 52, including notification of over 40 tribes and consultation with over 15 tribes. Panorama is also assisting with analysis of land use, wildfire, agriculture and forestry, and minerals impacts in the EIR.	Cultural Resources
Inyo	X	X	<b>Sabrina Lake Road Bridge Replacement:</b> The project included replacement of a roadway bridge over the Middle Fork of Bishop Creek in Inyo County, California. The project area included land under the jurisdiction of the US Forest Service, in the Inyo National Forest, and the source of funding was through the Highway Bridge Program. Caltrans was the lead agency under NEPA. Panorama prepared a CEQA IS/MND and prepared preliminary environmental studies as required by Caltrans for a Categorical Exclusion under NEPA. The IS/MND was approved by the County in November 2011. Environmental Studies conducted for Caltrans requirements included a Preliminary Environmental Study, Natural Environment Study (NES), Limited Phase I Initial Site Assessment, wetland delineation, historic property survey report and archaeological survey report. Panorama also prepared permit applications for the Corps, CDFG, and Lahontan RWQCB. Panorama also provided the restoration plan and oversaw site restoration for the years following completion of the bridge replacement.	Biology, Cultural Resources, Hydrology, Traffic, Recreation
Inyo	X	X	<b>Laws Railroad Project:</b> The project included restoration and reconstruction of a historic railroad and installation of an historic bridge northeast of the City of Bishop. The project lies within a known sensitive, but previously uncharacterized, environment. The environmental review was implemented by Inyo County Public Works Department, but was partially funded by a Transportation Enhancement Act grant. Panorama prepared a joint IS/EA and conducted extensive studies including for listed avian species, other wildlife and botanical species and prepared a Natural Environment Study and a Biological Assessment. Panorama also prepared a geologic hazards study, visual impact study, extensive wetland delineation study, and cultural resources studies.	Biology, Cultural Resources, Hydrology, Recreation
Inyo		X	<b>Inyo County Emergency Road Openings:</b> Inyo County conducted emergency maintenance on eight roads that were severely damaged by stormflows. Over 100 miles of roads were damaged by storms in the summer of 2013 and required maintenance to reopen the road to public access. The maintenance activities were funded by Caltrans and the Office of Emergency Services. Caltrans allowed maintenance to be conducted but required after the fact surveys and environmental documentation to support funding. Panorama conducted GIS analysis and aerial photo interpretation of pre- and post-storm aerial images to evaluate the extent of storm damage on over 101 miles of roads and quantify the area of impacts to waters of the state for after the fact permitting. Waters of the state were mapped using aerial imagery only due to the remote nature of the roads. Pre- and post-storm aerial imagery was analyzed on over 100 miles of roadway to evaluate where roadway impacts occurred in waters of the state. The GIS analysis and approach to mapping of resources and impacts was approved by CDFW. Key issues included project definition, impacts to waters of the state, and cultural resources.	Biology, Cultural Resources
Inyo	X	X	<b>Dehy Park Project:</b> Panorama worked with Inyo County and Caltrans on the Dehy Park Improvement Project. The park is located on land leased from the City of Los Angeles, Department of Water and Power (LADWP).	Biology, Cultural Resources (Burial)



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			<p>The park improvements would be implemented in two phases to correspond with the funding provided by two grants. Inyo County received a Sierra-Nevada Cascade (SNC) grant to improve the park and its facilities, including expanding the size of the park, performing bridge demolition and construction, and installing other park amenities. These improvement activities would be implemented in the first phase of park improvements. The County also received a federal TEA grant to improve visitorship, parking, Americans with Disabilities Act (ADA) compliance, and recreational trails. These activities would be constructed in a second phase of improvements. Panorama prepared an IS under CEQA for the park improvement project, including all noticing. The Panorama team also prepared Caltrans studies to support a CE with Studies for the TEA portion of the project. Studies prepared included a Floodplain Study, a Traffic Study, and a Natural Environment Study. Panorama coordinated with the County and Caltrans to finalize the scope of each study. Extensive archaeological work was required for the proposed project, including the discovery of human remains and a Native American burial during cultural survey work. Panorama led the outreach to the tribe to address the treatment of the remains through an MOU with the ACHP and the Tribe. Panorama worked closely with the County and Caltrans to complete the archaeological studies and prepared archaeological reports and a Section 4(f) of the Department of Transportation Act report.</p>	<p>Discovery),  Hydrology, Traffic</p>
Inyo	X	X	<p><b>Tecopa Sewage Lagoon:</b> Panorama worked with Inyo County Department of Public Works and the Barstow field office of the BLM to prepare CEQA and NEPA documents for repairs to a sewage pond in Tecopa, California. The sewage pond was built without a liner and had been experiencing seepage that needed to be repaired. The percolation and the seepage from the pond had established habitat for the Amargosa vole, a federal and state endangered species thought to be extinct until it was found in Tecopa. The BLM has identified an Area of Critical Environmental Concern (ACEC) for the vole and the USFWS has prepared a species recovery plan. Panorama has contacted all agencies involved (USFWS, BLM, California Department of Fish and Game, and the Lahontan Regional Water Quality Control Board) to discuss possible project modifications that could control the seepage but also minimize impacts to the vole. Panorama also performed a detailed quantification and analysis of water flow from the ponds to determine the amount and design of the augmentation flow.</p>	<p>Biology,  Hydrology</p>
Inyo	X	X	<p><b>Walker Creek Road Bridge Replacement:</b> The project involved construction of a new free-span bridge over the Los Angeles Department of Water and Power (LADWP) Los Angeles Aqueduct and realigning Walker Creek Road to the new bridge. Inyo County was the CEQA lead agency. Caltrans (on behalf of FHWA) was the NEPA lead agency. Panorama worked with County and engineering consultant staff to prepare the IS/MND under CEQA and technical studies to support Caltrans' preparation of a NEPA document. Caltrans technical studies included an NES, ASR, HPSR, Finding of Effect, Section 4(f) de minimis memo and Biological Assessment. The project is located in the range of Mojave desert tortoise and Mohave ground squirrel, which are listed on the California Endangered Species Act. Panorama prepared the application for Incidental Take Coverage for both species.</p>	<p>Biology, Cultural  Resources</p>

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Inyo	X	X	<p><b>Carroll Creek Bridge Replacement:</b> The project involved construction of a new free-span bridge over the Los Angeles Aqueduct and realigning Carroll Creek Road to the new bridge. The project crosses BLM and LADWP land and is funded by FHWA. Inyo County was the CEQA lead agency. Caltrans (on behalf of FHWA) was the NEPA lead agency. Panorama worked with County and engineering consultant staff to prepare the IS/MND under CEQA and six technical studies to support Caltrans' preparation of a NEPA document. Caltrans technical studies include an ASR, HPSR, Finding of Effect, Biological Assessment, and Section 4(f) de minimis memo. The project also required an encroachment permit from LADWP for construction work over the Los Angeles Aqueduct. Panorama is assisting the County in obtaining these permits. Panorama managed subconsultants who conducted biological reconnaissance surveys, rare plant surveys, and desert tortoise surveys according to USFWS protocol. Specific concern for cultural resources in the project area requires the County to conduct an Extended Phase I cultural resources inventory, necessitating an additional permitting process with BLM.</p>	Biology, Cultural Resources
Inyo			<p><b>Sunland Drive Culvert Replacement:</b> Panorama provided the permitting for the extension of culverts along Sunland Drive. Panorama obtained 401, 404, and Section 1600 permits for the project.</p>	Biology, Hydrology
Inyo	X	X	<p><b>Riverside Road Bridge Replacement Project:</b> The project included the replacement of Inyo County Bridge #48C-29, located on Riverside Road in Inyo County, approximately 2 miles northwest of the intersection of US 395 and US 6 near Bishop. The project also included widening of the canal under the bridge. Panorama prepared the technical studies to support a NEPA CE and a Categorical Exemption under CEQA. Obtained Section 401, 404, and 1600 permits and oversaw restoration after construction was complete.</p>	Biology, Hydrology
Inyo		X	<p><b>Schabbell Lane Road and Culvert Improvements:</b> The County of Inyo Department of Public Works proposed to conduct the Schabbell Lane Improvement Project, which involved repaving a portion of Schabbell Lane and replacing 14 culverts along the roadway. Schabbell Lane is a two-lane arterial road that traverses the Fort Independence Reservation, north of Independence, California. Panorama completed various studies and prepared an IS/MND for the project. Panorama also conducted pre-construction biological fieldwork, construction monitoring, including of a stream diversion to facilitate the work, and then prepared permit applications and restoration plans for the project.</p>	Biological Resources, Hydrology
Inyo		X	<p><b>Lone Pine Rehabilitation and Bike Lake:</b> Panorama prepared the Preliminary Environmental Analysis Report for this project, which included restoring road pavement to good service condition and ride quality in the Town of Lone Pine, as well as providing striping bike lanes on East and West Post Street, North and South Lone Pine Avenue, and North and South Lake View Street and improving bus parking. Panorama prepared a biological study for the project.</p>	Transportation, Biology
Inyo		X	<p><b>City of Bishop Grove Street Safe Routes to School Project:</b> The City of Bishop proposed to upgrade curbs, gutters, sidewalks, and water and sewer infrastructure along Grove Street and Hammond Street in Bishop, California. The purpose of and need for the proposed project was to address safety issues for students</p>	Transportation, Biology

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			walking and biking to and from school along Grove Street and to improve utility infrastructure. Panorama prepared the IS/MND for the project.	
Inyo	X		<b>Bishop Pine to Park Bike Lane Project:</b> Panorama prepared an IS/ND for this 1,000-foot new paved bike and pedestrian path through the City of Bishop	Recreation
Inyo	X		<b>Coso Road and Tuttle Creek Road Projects:</b> These two projects included proposed improvements by Inyo County Public Works to Coso Road (from the intersection of Highway 395 to the Coso Geothermal Plant) and Tuttle Creek Road (Whitney Portal Road through the Alabama Hills to Thundercloud Lane). Panorama led biological and cultural resources surveys to support the planning process.	Cultural Resources, Biology
Inyo	X		<b>See Vee Lane:</b> Panorama provided environmental support for this project that included extending See Vee Lane north from Highway 395 along the eastern boundary of Highlands Mobile Home Park in Inyo County, California. Panorama worked with Eastern Sierra Engineering on the planning phase of the project, including preparation of the cultural resources survey report, the biological resources survey report, a wetland delineation and organization of a public meeting. We also scoped future steps including additional focused wildlife surveys, CEQA review, and the permitting, including Section 404 permitting.	Biology, Cultural Resources, Traffic
Inyo	X	X	<b>Ed Powers Bike Lane:</b> The project included widening the pavement on an existing road and adding the necessary striping to add a bike lane to Ed Powers Road just outside Bishop, California. Panorama led the cultural resources survey to document resources in the APE and reviewed the Archeological Survey Report and Historic Property Survey Report for Caltrans to support a NEPA CE. Panorama also conducted field visit to document drainages near the project area for permitting and supported Native American consultation. Panorama also prepared a Categorical Exemption under CEQA.	Cultural Resources
Inyo	X	X	<b>Trona Wildrose Road Repair:</b> The Upper Trona Wildrose Road Scour Repair Project involved repairing approximately 2 miles roadway in the remote Panamint Valley. The road experienced significant scour along much of the 2-mile stretch during summer storm events in July 2013. In one location, the road was undercut so badly that an 8-foot hole formed on the side of the road. Repairs included installing an armored embankment using gabion baskets along the most-severe damage location. Un-armored repairs along the remainder of the scour included shoulder backing, restoring road grade, and paving. The project utilized California OES funding and, therefore, was required to adhere to strict design regulations. The project was exempt from CEQA; however, permit notification packages and federal approvals were required. Panorama consulted with federal landowners (BLM and NPS) and permitting agencies (CDFW and Regional Water Quality Control Board) to prepare an environmental package that could be used by all parties to approve and permit the project. Panorama prepared a comprehensive environmental package that detailed potential impacts to environmental resources. Panorama identified avoidance measures that would be implemented during project construction to ensure that environmental impacts did not occur. Permit applications were approved on the first draft. Federal agencies required a biological monitor to be present during all construction due to concerns of desert tortoise in the area. Panorama's biologist implemented a Worker Environmental Awareness Program,	Biology, Cultural Resources, Hydrology, Recreation

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			<p>monitored construction, and provided daily monitoring reports. Construction was completed without incident in 6 weeks. Panorama prepared post-construction reports in accordance with permit requirements. Key issues include identifying each federal agency's concerns and building consensus among the agencies around effective construction measures. Key resource topics were biological resources, cultural resources, and hydrology.</p>	
Inyo	X	X	<p><b>Hay Ranch Groundwater Transfer Project and Pipeline:</b> Panorama prepared an EIR for a groundwater pumping project that involved construction of a 9-mile pipeline across land managed by the BLM and U.S. Navy, a pumping station, an electrical substation, and two large water storage tanks. The Coso Operating Company, LLC sought a 30-year Conditional Use Permit from the Inyo County Planning Commission to extract groundwater from two existing wells and deliver the water to the injection distribution system at the Coso geothermal field in the northwest area of the China Lake Naval Air Weapons Station. The project was highly controversial due to the potential to cause off-site impacts to Little Lake Ranch, which includes a wetland habitat restoration project located downstream of the Hay Ranch property. Panorama, with Geologica, Inc., performed a long-term groundwater pumping test and groundwater drawdown modeling for the project. Panorama also performed reconnaissance biological surveys along the pipeline route. Other major issues that were addressed in the EIR included impacts on the Coso Hot Springs, a Native American site listed on the National Register of Historic Places, and impacts on special-status species along the project route (desert tortoise and Mohave ground squirrel). Panorama also led public meetings for the Draft EIR, the Final EIR, and an appeal hearing for the project. Over 100 interested parties attended the Final EIR hearing. The EIR materials were used by BLM to prepare an EA for the project.</p>	<p><b>Biology, Cultural Resources, Hydrology</b></p>
Inyo	X		<p><b>Coso Geothermal Relicensing Cat Ex:</b> Coso Energy operates the U.S. Bureau of Land Management (BLM) East and West geothermal power plants located on the China Lake Naval Air Weapons Station (NAWS) on federal lease CA-11402 managed by the BLM. The power plants were licensed by BLM in 1989 when they began commercial operation. The license was issued for a 30-year operation period. Panorama conducted the environmental review for the relicensing of the Coso BLM East and West Power Plants. Panorama gathered background data, consulted with the US Navy, BLM, Inyo County, Lahontan Regional Water Quality Control Board, and Great Basin Unified Air Pollution Control District and provided the documentation to support a CE under NEPA for the project.</p>	<p><b>Biology, Cultural Resources</b></p>

## **Key Staff Blurbs**

### **Tania Treis, Principal**



**Tania Treis** is a Principal and the founder and owner of Panorama. She has served as the Project Manager for all of Panorama's fuel reduction projects, including the MMWD BFFIP and EIR project and the Midpen WFRP and EIR. Tania has over 20 years of experience in environmental planning and management and has extensive CEQA and NEPA experience and knowledge. Additionally, Tania led the Gemini Solar Project technical studies and EIS process, and truly understands the intensity and focus needed to serve as the IDT Lead for a large-scale and complex effort. Tania led the Gemini Solar Project from mid-2018 through December 2019 and during that time, it was her primary focus and project. Tania brings a broad and valuable skill set. She understands computational methodologies and modeling through her educational background, which focused heavily on applied mathematics, being awarded master's degrees in both biology (population biology) and geology (geomorphology). Tania also has a close working relationship with the forest ecologists on several projects, including from Spatial Informatics Group and is well versed in the wildfire-risk assessment quantitative and qualitative processes and how to use landscape-scale data for technical analyses. Mostly, Tania brings a collaborative approach and an ability to bring together numerous different experts, specialists, regulators, and interested parties to motivate them to achieve a common goal. She can work well with different personalities. Tania has a deep understanding, based in practice and experience, of all the technical components of a NEPA and CEQA analysis and, therefore, plays an integral role when developing studies and mitigation. Her role includes asking critical questions to technical experts to ensure a sound approach, facilitating the generation of solutions to issues that arise through brainstorming of ideas across multiple team members, and assisting team members that may need help to complete their analyses and meet their timelines. Tania also understands and highly values the importance of clear and concise writing in her own practice and instills this importance with all her staff. Technical review and editing for quality are extremely important to her. She is also highly skilled at managing the scope, schedule, and budget for projects. Tania is very familiar with the Eastern Sierra, having worked on many of Panorama's projects in Inyo County since 2002, including the Hay Ranch project, Dehy Park, Sabrina Bridge Replacement, Tecopa Sewage Lagoon, among others. She understands the cultural and biological resources of the region.

### **Jessica Koteen, Sr. Manager and NEPA Expert**

**Jessica Koteen** has over 22 years of experience as an environmental compliance and regulatory permitting specialist. She has worked with both the private and public sectors on a wide range of projects, including recreation and community master planning, new school construction, wind energy development, and park and trail development. As a project manager, her skills span the California

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Environmental Quality Act (CEQA), the Montana Environmental Policy Act (MEPA), and the National Environmental Policy Act (NEPA) compliance, interagency coordination, regulatory permitting, and the facilitation of community outreach efforts. Ms. Koteen has been working with numerous federally recognized tribes throughout California to manage the NEPA components for a variety of projects on their Reservations, including multiple projects for the Bishop Paiute Tribe in Bishop, CA. She has also assisted in the development of Forest Service Environmental Assessments and Management Plans throughout Montana and Idaho, including assisting the Flathead National Forest with preparation of their Comprehensive River Management Plan, consistent with the statutory direction of the Wild and Scenic Rivers Act of 1968 (Public Law 90-542), that protects and enhances the free flowing conditions, water quality and outstandingly remarkable values (ORV) of the designated Wild and Scenic segments of Flathead River. In addition, she also recently completed the Comprehensive River Recreation Management Plan for the Helena Lewis and Clark National Forest (HLC) Gates of the Mountains Recreation Area and surrounding Missouri River Corridor. The Plan will guide future management decisions and actions within the framework of existing public policy and resource plans.

**Senior Manager with NEPA and Land Use and Planning Expertise**



**Emily Capello** has 15 years of experience permitting a wide range of projects and 20 years of overall experience. Emily is a recognized expert in NEPA compliance. She has led dozens of complex projects and understands the need for creativity and perseverance to reach a successful completion of a project. She is able to keep track of the numerous details that feed into the technical reports and NEPA or CEQA documents and that will matter to the reviewing agencies. Emily has been often praised for her responsiveness, her depth of knowledge, and for the quality of work that is prepared under her watch. Emily's relevant experience includes serving as the Project Manager for CDFW's on-call contract for PG&E projects including preparing an IS/MND for the PG&E Gas Pipeline-300A/B Vegetation Management Project in San Benito County. She was also the Project Manager for two NEPA EAs for vegetation management and fire safety on BLM-administered land, the Border Fuels EA running along the border of San Diego and Mexico, and the San Felipe Creek Vegetation Management in Imperial County. She worked closely with the BLM California Desert District Fire Specialist when drafting the project descriptions to provide a clear understanding for the public regarding the types of fuels management activities that could occur and to leave the BLM the flexibility to use the most appropriate tools as dictated by conditions on the ground when fuels management was going to occur. Emily, through her NEPA experience, has particular expertise and understanding of recreation and other land use analyses.

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**Rita Wilke, Senior Planner with Noise Expertise**



**Rita Wilke** has 12 years of experience in the environmental fields. She is a NEPA and CEQA project manager, and has managed environmental compliance for wildfire and fuels management projects and runs the Sacramento Office. One of Rita's primary strengths is her ability to bring multiple parties and agencies together to come to a consensus on project direction, including federal, State, and local agencies. She has experience on projects all over California. Rita managed the Alpine County Fire Hazard Mitigation Plan and prepared the IS/MND. Rita has also led preparation of multiple Cat Exs, CEs, EAs, IS/MNDs, and EIRs. As a biologist by training, Rita also has extensive experience with completing resource permitting under the ESA and CWA. She has coordinated with State agencies, including the CDFW and the regional water quality control boards, and federal agencies such as the US Forest Service, USACE, and USFWS. Rita is located in the foothills, in El Dorado County. Rita also has prepared noise analyses, and through her experience on Alpine County and with the CPUC, has a strong understanding of fire and fuels and forestry practices. She also has managed many of Panorama's public works project with Inyo County, and has deep understanding and knowledge of the resources in the Eastern Sierra region.

**Caitlin Gilleran, Senior Planner and Air Quality Specialist**



**Caitlin Gilleran** has 12 years of experience and leads projects through the CEQA and NEPA process with technical expertise in addition to a keen understanding of environmental regulations and resources. She has prepared or managed numerous environmental documents and supporting technical reports, ranging from small addendums to large programmatic EIRs and EISs. Caitlin is especially effective at coordination with and assisting a client to define the technical project elements and performing technical analyses. She has managed project deliverables and technical subconsultants to meet tight deadlines and budgets. Caitlin has taken on project management for several projects that involved review of the designs for environmental constraints, coordination of multiple technical studies and deliverables, preparation of the CEQA and NEPA documents, direct coordination with the client and agencies, and performance of all administrative tasks associated with managing the schedule and budget. Caitlin has worked closely with Tania as her Deputy Project Manager for the Gemini Solar Project EIS, the Program EIR preparation for the WFRP for Midpen, and the Program EIR for the BFFIP for MMWD. Caitlin has many specializations and has conducted the modeling for air quality and greenhouse gas analyses for fuels management programs and has prepared traffic analyses. She played a major role in the weed assessment for the Gemini Solar Project and in the soils and erosion analyses for the BFFIP and WFRP EIRs.

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**Aaron Lui, Senior Planner and Visual Resources Expert (Resume in Section E)**



Aaron has 14 years of professional experience conducting environmental review and permitting for projects during all phases, pursuant to CEQA and NEPA. Aaron's planning and environmental review work has focused on defining projects, identifying constraints and feasibility issues, coordinating with agencies and stakeholders, authoring technical reports, evaluating project impacts, developing appropriate and feasible mitigation measures, and managing preparation of environmental documents. Aaron started his career in field implementation. He has extensive experience developing strategies to streamline field monitoring and reporting requirements for complex, long-term projects and programs, and evaluating the effectiveness of mitigation measures and seeking opportunities for improvement on future projects. Aaron's created the Excel implementation tool for MMWD, previously described. Aaron is also a visual resources specialist, having prepared the visual analysis for numerous projects, including the Gemini Solar Project EIS. He has advanced experience as a photographer and utilizes his composition techniques in his visual impact analyses, cartography, and graphic design. Aaron's other area of technical expertise is in health and safety and hazard assessment.

**Susanne Heim—Principal with Hydrology Expertise**



Susanne has 20 years of professional experience pertinent to environmental planning, management, and hydrology. She has expertise with regional, State, and federal environmental regulations. Susanne has prepared and managed the preparation of numerous documents in compliance with the NEPA and CEQA, Endangered Species Act, Clean Water Act, and California Endangered Species Act. Susanne is a permitting expert, particularly with regard to CDFW, Regional Water Quality Control Board, and Army Corp of Engineers permitting. She has prepared numerous Biological Assessments to support Biological Opinions. She also has specific expertise facilitating public outreach decision-making involving multiple stakeholders and federal, State and local agencies. She has been leading geothermal development and restoration efforts at the Salton Sea, involving multiple party and stakeholder coordination and design. Susanne has broad experience in natural resource planning and hydrology including 5 years as a contract manager with the US Army Corps of Engineers to address Lake Tahoe Basin Watershed Restoration. Her hydrology experience also includes oversight of water quality monitoring programs and developing programmatic guidance for water quality BMPs in the Lake Tahoe Basin.



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**Corey Fong—GIS and Cartography Providing Map Review and As-Needed Support**



Corey is a GIS Specialist with expertise in cartographic design, environmental science, and analysis using GIS models and programs with 18 years of experience. Corey has used ArcMap, ArcInfo, and ArcEditor from Esri to create and maintain GIS data and geodatabases and has experience with the Spatial Analyst and 3D Analyst extensions. TerraSync and Pathfinder Office software are used to integrate GPS data into project specific GIS. Corey has exported GIS project specific data to Google Earth Pro for environmental analysis and map production. He was the GIS analyst and cartographer for Panorama's work on all of our fuels management projects and solar EIS work and can provide review and support as needed for the EIS.

**Beth Duffey—Technical Editor**



Beth Duffey has more than 30 years of experience as a technical editor, document controls manager, and proposal editor, with over 20 years in reviewing environmental documents and supporting technical studies. She is adept at reviewing technical documents that demand careful attention on fast-track deadlines. She has ensured accuracy and consistency in complex engineering and environmental permitting, design, and construction management documents for major West Coast transportation corridors, comprehensive plans, and water/wastewater/water conveyance, hydrology, geotechnical, biological, and cultural studies, among many others. Ms. Duffey has in-depth knowledge of CEQA and NEPA requirements. Furthermore, she is certified in Controlled Unclassified Information and doing business with the federal government.

**Technical Specialists**

**Jeff Moffet, PhD — Economist**

Jeffrey Moffett is a sole practitioner with 30 years of experience working in the fields of economic analysis, revenue forecasting, statistical analysis, data-driven marketing, and business development and resource allocation, and has worked with Panorama on projects over the last few years. Jeff is frequently retained to develop economic forecasts, financial models, and price optimization. As an undergraduate fellow, Jeff studied economic development and forest utilization in Nepal. Throughout the 1990s, Jeff worked amidst Pacific Northwest forestry controversies to optimize land uses over time for both wildlife habitat and timber production. After moving to Colorado, Jeff worked in the mountain resort industry holding positions in marketing, lift pricing, and air service development. Working with all of the major US airlines, Jeff conducted numerous market feasibility studies to evaluate new routes and revenue maximizing schedules. Jeff and his family own 72 acres in Saguache County, Colorado, mostly covered with mature

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Douglas fir. They have thinned most of the forest over the past 15 years to promote forest health and mitigate threats from bark beetles and western spruce budworm. Larger saw logs were milled locally.

**Catherine Schnurrenberger—Botanist**

Catherine Schnurrenberger, is a sole practitioner who has over 30 years of experience conducting botanical surveys in the Sierra Nevada. She is familiar with the ecosystems, their function, and their flora. She has conducted field work in the Sierra since 1989 when she first began her work with the Plumas National Forest. Catherine has conducted surveys and provided technical analyses to address project impacts to special-status plants and to address vegetation condition for rangeland and forest health, and she has also conducted wetland delineations for various projects. She has supported Panorama on projects for over a decade. Catherine is an expert in impact assessment and thoroughly understands how to devise appropriate mitigation for botanical species and to address weed concerns. She has provided botanical support for numerous projects in the Sierra, including for the Lake Van Norden Dam Spillway Modification Project, the Middle Martis Creek Restoration Project, and the Scotts Flat Recreation Trails project, near Nevada City.

**Jim Paulus – Biologist**

Jim Paulus is a sole practitioner who received a Ph.D. degree in biology, emphasis in applied ecological sciences, from the University of California, Santa Cruz in 1993. He completed formal training in botanical taxonomy, GIS mapping, wetlands delineation, and CEQA/NEPA analysis and document preparation in order to continue developing the skills needed for applying environmental analyses to large-scale projects. As a lead agency scientist and as an independent biologist consultant, he has practiced these skills in the Eastern Sierra Nevada for the past 25 years. One example of his work was on the June Lake Hazardous Fuel Reduction project. He mapped plant communities to index sensitive resource presence and wrote Biological Assessment for Cal Fire regional forester's use to complete NEPA for hazardous fuels reduction grant implementation at 1120 private residences in June Lake Fire District. Dr. Paulus was asked to continue with the project to conduct annual monitoring surveys and reporting for sensitive resources (2015-2018), which were required mitigation. Demonstrated skills include forest stand health and fire risk assessment, identifying potential sensitive resource conflicts with hazardous fuels reduction projects, as well as the potential remediations. Jim also provided the biological resources support to Panorama for the Alpine County Wildfire Hazard Mitigation Plan and on numerous other of Panorama's projects in Mono and Inyo Counties.

**Dan Elliot, PhD —Cultural Resources Specialist**

Dan recently retired from the Forest Service after a 32-year career in cultural resources management and tribal relations and provides

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support to Panorama on an as-needed part-time basis. Dan's skills and experience were obtained over a nearly 40-year career in cultural resource management. Dan understands all aspects of cultural resource management under the Forest Plans, has extensive experience with consultations under the National Historic Preservation Act with the California State Historic Preservation Office and the Advisory Council on Historic Preservation. During his time on the Plumas National Forest, he gained experience with cultural resources management as part of the inter-disciplinary team for project planning for vegetation management, fuels reduction, ecosystem restoration, and recreation and historic preservation. He brings direct Forest Service EIS experience to the team, having prepared Cultural Resources Management sections of EISs, EAs, and CE's. He has also served as the Principal Investigator for all aspects of archaeological fieldwork, data collection, research and analysis, report preparation and dissemination for pre-contact and post-contact cultural resources and is a published author.

## Panorama Environmental Wildfire Hazard Reduction and Vegetation Management Projects

### Alpine County Wildfire Hazards Mitigation Plan

Vegetation management projects to reduce the risk of wildland fire are a high priority in Alpine County. The County received a grant to prepare a more detailed hazard mitigation plan to understand areas at risk and to implement methods to reduce risks. The project entailed a fire behavior modeling effort across the entire County coupled with a high valued resource and assets (HVRA) assessment using the Delphi Method to identify priority projects. Panorama worked closely with Scott Conway of Vibrant Planet to perform this analysis. Proposed PM, Tania Treis, led the preparation of the detailed Wildfire Hazard Mitigation Plan describing the process and methods.

The process to develop the plan and to conduct the CEQA review included frequent check-ins with a technical Steering Committee, comprised of County staff, the head of the Fire Safe Council for Alpine County, the head of the Biomass Collaborative, and staff from the Forest Service Districts 4 and 5. The assessment covered all of Alpine County, including Forest Service lands. Our team collaborated with the Forest Service staff to identify priority treatment areas and incorporate existing and planned treatments on Forest Service lands. The priority projects ended up heavily focused on private lands surrounding the major areas of development in the County (i.e., Markleeville, Woodlands, and Bear Valley), but also included a programmatic element to address prescribed burns in particular, on Forest Service lands. The plan includes the modeling results and fire hazard risks, the important infrastructure and resources to be protected, and the detailed implementation plan for three priority projects, including the specific fuel treatments such as new fuelbreaks, and defined the estimated costs associated with those treatments. The program included an element of community outreach to further inform the focus and to articulate the benefits of the program to the community. Panorama led hybrid in person and online public workshops to present the plan to the community and receive feedback just prior to the COVID-19 pandemic shutdowns.

The three top priority vegetation management projects identified through the process encompassed 860 acres, all on private lands. The prescriptions included manual and mechanical methods of vegetation management for fuel reduction on these properties. Panorama and the County had to work with the numerous landowners to obtain their buy-in, starting with

× Application of a risk assessment, similar to that being used for the NYFP and conducted by the same expert, over the entire 476,000-acre county landscape to home in on areas of highest threat to prioritize fuels reduction projects.

× Coordination of plan development and environmental review with a Steering Committee, including staff from two Forest Service Regions (4 and 5).

× Defined and led stakeholder and public outreach meetings and workshops, including an effective hybrid in-person/on-line version.

× Incorporated environmental considerations when defining and prioritizing fuels treatments.

× Developed a Programmatic IS/MND to address three specific projects in detail but also to cover potential future projects including prescribed burning on Forest Service lands.

× Completed entire project without ever deviating from the initial schedule and entirely within the initially allocated, grant-funded budget.

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conducting biological and cultural surveys on their land. Panorama prepared a Programmatic CEQA IS/MND to address the program including the top three priority projects at a project level, as well as nine additional projects at a program level, plus prescribed burning across a larger landscape, including on Forest Service lands (including identifying the additional environmental review, NEPA review, and surveys that would be needed prior to undertaking future projects). The IS/MND was unanimously certified and the plan adopted on February 16th.

**Midpeninsula Regional Open Space District Wildland Fire Resiliency Program**

This comprehensive program covers over 60,000 acres of preserve wildlands managed by Midpen, including all 26 of the District’s preserves. The program consists of several components, including a Vegetation Management Plan that includes the prescriptions for creation and maintenance of fuelbreaks and fuel reduction areas constructed along ingress-egress routes and key areas to protect infrastructure and assets; a Prescribed Fire Plan that defines prescribed fire units and methods; a Resource Advisory Map and Wildland Fire Pre-Plan; and a Monitoring Plan. The program includes the habitat types, the fuels treatment methods in each habitat type, the implementation tools (including manual, mechanical, grazing, prescribed fire, and herbicides), an implementation plan and methodology to prioritize projects, and an estimated costing.

Panorama is working with Midpen’s staff through all phases of development of the program, including consultations with partner agencies, tribal entities to understand and integrate Native American cultural burning practices, CAL FIRE, and fire protection agencies. Work to date has included developing a policy gap analysis and recommendations for revised policies that were presented to the Board of Directors; developing the Vegetation Management Plan through coordination with Midpen’s facilities teams for the open space preserves, and presenting the plan to the Planning and Natural Resources Committee; developing the Monitoring Plan; developing the program-level Prescribed Burn Plan; developing the Monitoring and Adaptive Management Plan, designing and organizing three public outreach workshops with Midpen and numerous partner agencies to present the overall program and goals to the public and receive feedback; defining the appropriate CEQA review and identifying the schedule that will drive the project; preparation and distribution of the Draft EIR, including performing all technical analyses; and preparation of the Final EIR. The EIR certification goes to the Board of Directors on May 12th.

- × Defined fuels treatments over a large area and prioritized work for both fire protection and ecosystem resiliency/restoration.
- × Coordinated input of multiple parties including fire districts, CAL FIRE, and other jurisdictions, with over 25 meetings scoped.
- × Defined and led stakeholder and public outreach meetings and workshops.
- × Incorporated environmental considerations when defining and prioritizing fuel treatments.
- × Developed a detailed monitoring program to verify accomplishment of treatment objectives and monitor for negative effects by utilizing indicator parameters and pre-, during, and post monitoring protocols to support an adaptive management approach.

Panorama’s approach to the Program EIR analysis, because it covers work on over 60,000 acres of land, is similar to that prepared for MMWD and uses the conditions-based assessment model. A detailed implementation plan to document coverage of future projects under the EIR

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and to determine the appropriate mitigation measures to implement will be in the Final EIR. Key technical studies were prepared to address visual impacts, to model air quality and greenhouse gas emissions, to assess biological resources impacts based on habitat conditions and treatment methods, to assess cultural resources based on resource sensitivity, with follow-up site specific surveys as needed, and to address geology and slope stability concerns based on the recommendation in the Forest Practice Rules, given conditions in the field at the time of the work. The EIR addresses manual and mechanical vegetation management actions in enough detail that work can be carried out immediately upon completion of the EIR. A Tiered EIR will be prepared to address specific prescribed burn actions that have a longer planning horizon. Completion of the program and EIR will allow Midpen to apply for grants to perform the work, potentially in collaboration with neighboring jurisdictions.

**Link to the Program Documents:** <https://www.marinwater.org/sites/default/files/2020->

### **Marin Municipal Water District Biodiversity, Fire, and Fuels Integrated Plan and EIR**

Panorama prepared the BFFIP in close collaboration with Marin Municipal Water District staff and prepared the associated CEQA Program EIR to address vegetation management activities for fire but also ecosystem resiliency and restoration on 22,000 acres of forested watershed lands in Marin County. The Final Program EIR was certified and the BFFIP approved in November 2019. The BFFIP includes definition of fuels management zones for both infrastructure (roads and structures for public safety) and for natural resources enhancement (ecosystem resiliency). The United Nations Educational, Scientific and Cultural Organization included the Mount Tamalpais Watershed as one of the thirteen protected areas of the Golden Gate Biosphere Reserve in 1988, recognizing the global significance of its biodiversity. The entire watershed is also Critical Habitat for northern spotted owl. Panorama, with MMWD, identified 27 management actions, the zones where each type of action could occur, and the prioritization of the actions. We built a 5-year plan into the BFFIP, which included a costs analysis, total acreages to treat by zone, and performance criteria to measure the success of treatments annually with adaptive management, as needed. Landscape-level mapping was performed to understand biological, cultural, soil and slope, noise, visual, and other constraints. The Program EIR analysis was performed using an approach similar to the Forest Service condition-based assessment approach.

The EIR addressed impacts of various types of fuel treatments by habitat or cover type and fuels management method. The program and EIR defined the procedures to undertake prior to implementing a specific project under the program, including identifying the resources of concern and appropriate mitigation measures,

- × Defined fuel treatments over a large area, prioritizing work in Marin County.
- × Coordinated input of multiple parties including fire districts, CAL FIRE, Golden Gate National Recreation Area, and Marin County Parks.
- × Defined and led stakeholder and public outreach meetings.
- × Addressed concerns of numerous interest groups and their concerns regarding fuels management projects in Marin County, and particularly impacts to rare plants and spotted owls.
- × Thoroughly assessed human health risks of herbicides in an early iteration of the program through an herbicide risk assessment process.
- × Developed implementation framework and participating in implementation phase.

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conducting pre-activity surveys, and implementing avoidance or mitigation based on the conditions at the time and in the area of treatment, including for northern spotted owl potential impacts. Panorama also led outreach efforts for the plan and EIR. The methods of fuels reduction include defensible space creation and maintenance around infrastructure; fuelbreak creation, particularly along ingress and egress roads and ridgeline roads; and fuel reduction (called wide area fuel reduction zones or WAFRZ) for habitat enhancement and resiliency over thousands of acres. The methods utilized include manual and mechanical removal, prescribed herbivory, and prescribed burning. The plan also allowed for experimental treatment methods to be used on a case-by-case basis (including foams and sprays, tarping, or other methods).

Panorama is assisting with the implementation phase of the plan. Our team created an innovative Excel tool for the plan managers and implementation team to use to identify, plan for, and track mitigation requirements as individual projects are undertaken under the plan. The tool allows the user to identify through drop down menus the activity (e.g., fuelbreak creation) and tools to be used (e.g., mechanical removal), and the phase (planning, pre-work, during work, or post work) and then a checklist of relevant mitigation is automatically generated.

**Link to the Program Documents:** <https://www.marinwater.org/sites/default/files/2020-09/Biodiversity%2C%20Fire%20and%20Fuels%20Integrated%20Plan.pdf>

### **Marin Wildfire Prevention Authority (MWPA) On-Call Consultant**

Panorama was selected to assist the newly formed MWPA with the implementation of their programs related to wildland fire prevention. Marin County voters passed Measure C in 2020, which established a 17-member Joint Powers Authority to fund and oversee proactive state-of-the-art wildfire prevention and preparedness efforts within the County. The MWPA is a newly formed entity and as such, Panorama's role has been dynamic and encompassing many aspects of project definition, environmental review, community and agency outreach, and implementation. Several projects overlap multiple jurisdictions for which Panorama provides coordination, including County Parks, State Parks, and the National Parks Service, requiring NEPA review.

Panorama works closely with the local fire protection agencies to assist in the definition of projects, including they types of fuel treatments. Approximately 26 projects have required environmental review for the 2021 Work Plan. One larger project includes the development of a 38-mile-long fuelbreak around communities in the greater Ross Valley. Our team defined the risks and devised the fuel treatment units and priorities for this project in the context of the VTP EIR and is preparing the Project Specific Analysis under the VTP EIR for this project. This project is a community project, and Panorama conducted several stakeholder meetings in order to understand their concerns and to integrate them into the project design. Panorama also designed and led a large community workshop that included a main session and three break out sessions in order to inform the community of the project and hold meaningful discussions on key topics.

### **UC San Francisco Mount Sutro Vegetation Management Plan**

Panorama prepared the EIR for UCSF's vegetation management plan for the Mount Sutro Reserve. The reserve is a 61-acre open space in the middle of San Francisco. The eucalyptus forest was generally unhealthy and had never been maintained. The tree densities were too high to sustain a healthy stock and trees had been heavily affected by drought and disease. Panorama prepared a technical analysis that included a detailed scenario of tree removal, based on the plan's fuel treatments, necessary to assess various types of impacts including fire hazards and carbon sequestration. Panorama provided revisions and updates to the Vegetation Management Plan prepared by the forester, and performed detailed fire behavior modeling using FlamMap.

*Highlights!* Panorama prepared a comprehensive CEQA EIR and worked with the project's RPF to refine, revise, and improve the vegetation management plan treatments, under the guidance of a Technical Advisory Committee. The project was highly contentious with most concern from immediate neighbors. The focus was on how to treat eucalyptus forests in a phased approach, including restoration for areas of removal.

**Link to the Program Documents and EIR:** <https://www.ucsf.edu/about/locations/mount-sutro-open-space-reserve#tabs-3>

### **Stanford University Wildfire Management Plan**

Panorama with Vibrant Planet was selected to prepare a Wildfire Management Plan to protect 8,100 acres of lands at the wildland urban interface (WUI) for Stanford University. The university prepared a preliminary plan in September 2019. Panorama was brought on to expand that plan through fire behavior modeling, identification of the important resources and assets to protect (a risk assessment) to prioritize the work, and definition of detailed vegetation management prescriptions by mapped land units, including manual and mechanical methods, prescribed herbivory, and prescribed burning. A wide range of conditions are being addressed, considering the uses of the properties, ranging from rangeland, to equestrian, to grassland, to an academic ecological preserve, to the linear accelerator lands at SLAC. Panorama is also defining a strategy to collaborate with the municipalities within which the campus falls, and to identify ways to communicate and build off the work being performed by those entities. Scott Conway and Mike Cartmill are integral team member on this project, as are their GIS staff. Panorama planned and led multiple stakeholder meetings with the six municipalities within which the campus falls. Attendees ranged from General Managers, to emergency and fire personnel from local fire departments, to CAL FIRE staff, to public works leads.

*Highlights!* Panorama and Vibrant Planet are currently defining the treatments and overseeing implementation this year and will continue to do so for the next 5 years.

### **San Lorenzo Valley Water District Wildfire Plan**

Panorama and our team of specialists (including Vibrant Planet) were selected to provide services to address wildfire concerns in the San Lorenzo River Watershed for the SLVWD. Our team is accounting and mapping the SLVWD resources and assets in order to understand



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exposure to potential wildfire during critical fire weather. During the CZU August Lightning Complex fires, significant areas of the watershed burned. The Panorama team was able to provide real time mapping as soon as the fire started, which essentially allowed the District to shut off critical infrastructure that prevented contamination that could have harmed the water system for months. Panorama prepared a grant application for a California Forest Improvement Program grant and is preparing a mitigation plan to reduce exposure and prioritize treatments for remaining high risk areas, with a focus on defensible space and hardening treatments around the most vulnerable infrastructure. Our team is continuing to work with the SLVWD to build implementation grant proposals while also canvassing other funding opportunities to expand the scope of the project to include more in-depth analysis and implementation across all landowners in northern Santa Cruz County. Panorama's assistance resulted in the SLVWD receiving hundreds of thousands in implementation dollars this year.

*Highlights!* Panorama coordinated and talked with numerous agencies and entities, ranging from the San Mateo and Santa Cruz RCDs, the Santa Cruz Mountains Stewardship Network, Santa Cruz Fire Safe Council, CAL FIRE staff, the Natural Resources Conservation Service, Santa Cruz County, and the Watershed Emergency Response Team.

**Vegetation Management Plan for Portola Valley Cluster Subdivision Project**

Panorama is working with a land developer to prepare a Vegetation Management Plan for a for a 75-acre parcel in the Town of Portola Valley to support an EIR process for a cluster subdivision on 6 acres of the property. Our team includes Phil Dye of Prometheus, and Scott Conway of Vibrant Planet. The project is comprised of heavily vegetated steep slopes of mostly overgrown oak woodland with dense understory of poison oak. Panorama's team conducted a detailed fire behavior modeling effort using the IFTDSS (with FlamMap 6.0) and Behave, met with the Woodside Fire Protection District, and prepared a detailed vegetation management plan that included initial treatments for the property based on cover type, an estimate of costs for the work, and an on-going maintenance plan.

*Highlights!* Our team conducted fieldwork to modify the fire behavior model, and also modeled post-treatment to demonstrate the substantial decrease in fire hazard once the treatments are implemented. Our team also built into the plan provisions to minimize effects to species like San Francisco dusky-footed woodrat, California red-legged frog, significant trees, and nesting birds. Team members Phil Dye, Tania Treis, and Scott Conway prepared the implementation plan, including the contractor specifications, resource protection measures, contractor Request for Proposals, and contractor oversight during the work.

**Santa Clara Valley Water District Fuel Management Design Projects and VTP EIR PSAs**

Panorama was awarded an on-call environmental services contract with the Santa Clara Valley Water District (Valley Water) in 2020. Under this contract, and given Panorama's extensive wildfire mitigation experience, Panorama is providing wildfire hazard assessments and treatment plans for several projects. One active project includes the development of Fire

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Management Plans for six key facility water treatment plants across Valley Water's ownership and defining treatment options including vegetation management and facility hardening. The plans are being developed through conducting a Rapid Wildfire Risk Assessment, site visits, GIS mapping of land ownerships, internal coordination with Valley Water staff, and identification of permitting and planning requirements to complete the work.

*Highlights!* As separate project under this contract includes defining the treatment program for Valley Water owned acreage around the Stevens Creek reservoir. Panorama's certified arborist and forester, Elizabeth McCullough visited the project site to assess conditions, define access, and define project treatments in accordance with the definitions and methods described in the VTP PEIR. Our team is mapping the units and will then assist Valley Water in preparation of a PSA under the VTP EIR for this project. The areas are considered within the Wildland Urban Interface and the work will interface with the work Panorama prepared for Midpen within Pichetti Ranch and Fremont Older Open Space Preserves.

**San Mateo County Resource Conservation District (RCD) El Granada Fire and Fuels Management Assessment**

The RCD, along with stakeholders and communities along the mid-coast, particularly in El Granada, were interested in applying science-based methodologies to develop a range of potential options to reduce wildfire hazard threats along the mid-coast. The focus is on the area-specific challenges in El Granada, which center around the concentration of eucalyptus, steep topography, and limited access. The 2018 Community Wildfire Protection Plan (CWPP) for San Mateo-Santa Cruz Counties also identifies an objective to thin the eucalyptus at Quarry Park and to mitigate risks from eucalyptus through thinning and removal. The RCD and San Mateo County recognized that the next steps are to identify and further develop actions most likely to reduce wildfire risk and build wildfire resiliency, grounded in a thorough assessment of site-specific risks and opportunities. Panorama has been assisting the RCD with meeting coordination with numerous community stakeholders, developing a fire hazard model to identify the areas of highest risk, and developing treatment options ranging from home hardening to grant programming to vegetation management in order for a large-scale community protection program to be developed. Treatments are being identified with a summary of their anticipated costs and environmental review, as well as quantitative and qualitative assessments of the risk reduction from the actions.

### SIG Project Experience

The SIG Team has provided fire modeling, vegetation mapping, LiDAR analysis, prescribed fire, municipal fire, unmanned aerial vehicle (UAV) based mapping, greenhouse gas (GHG) analysis, and other geospatial analysis in support of several vegetation management programs in California. This experience has broad application for vegetation management for private and publicly owned and managed lands and infrastructure. Related projects have included:

- **Eastern Sierra Climate & Communities Resilience Project (ESCCRP):** Spatial Informatics Group (SIG) is working with the 55,000-acre Eastern Sierra Climate & Communities Resilience Project (ESCCRP) to help build resilience to catastrophic wildfire in and around the mountain community of Mammoth Lakes, California. The project seeks to restore ecosystem health by applying science-based forest restoration treatments at a faster pace and larger scale. SIG was hired because of its experience in wildfire science and operations, as well as its expertise in land restoration and maintenance. SIG will coordinate with Inyo National Forest on the development of proposed actions for the ESCCRP project area; create fire behavior modeling maps and other products for sharing with stakeholders and the public; help plan the development of a prescribed fire workforce; and help inform stakeholders on fire hazard and risk, as well as the actions needed to address the threat of wildfire across the Sierra Nevada.

**Pyregence Consortium Lead:** The state of California at a critical inflection point. In order to mitigate the devastating effects of wildfires, in 2019, SIG helped form The Pyregence Consortium. The mission of the consortium is to better equip everyone affected by wildfires, from concerned citizens, to utility companies and state agencies, with the information they need to reduce wildfire risk. Funded by a grant from the California Energy Commission, the consortium is comprised of experts in wildfire, forestry, weather and climate change from 18 institutions across academic, private consultancy and government sectors. More information is available at <https://pyregence.org/>

- **Development of Wildfire Resiliency Program for the Mid Peninsula Regional Open Space District:** This comprehensive program covers over 64,000 acres of preserve wildlands managed by Midpen, including all 26 of the District's preserves. The program consists of several components, including a Vegetation Management Plan; a Prescribed Fire Plan that defines prescribed fire units and methods; Resource Advisor Maps and Wildland Fire Pre-Plan; and a Monitoring Plan. More information is here <https://www.openspace.org/our-work/projects/wfrp>
- **Alpine County, California- Wildfire Hazards Mitigation Plan:** SIG and partners developed the Wildfire Hazards Mitigation Plan for Alpine County. The plan includes an evaluation of fire hazard risks through modeling, identification and ranking of high value resources and assets (HVRAs) through a collaborative process with a steering
- **An Assessment of Fire Risk for Nevada City and Grass Valley, CA:** SIG worked with CALFIRE on an assessment of wildfire risk to the communities of Nevada City and Grass Valley. The project

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includes developing potential fuel treatment locations for risk mitigation as well as an assessment of factors affecting structure loss during the 2018 Camp Fire.

- **El Dorado County Community Wildfire Protection Plan:** SIG worked with the El Dorado County Fire Safe Council to develop a comprehensive CWPP for the west slope of El Dorado County, California. The plan was based on the results of a landscape scale community risk assessment and treatment prioritization strategy with emphasis on establishing logical fuel management areas that are integrated with the existing treatment network. Treatment projects will be designed to provide community protection while estimating potential costs and provide communities with a standardized template to assist with funding and grant applications.
- **Assessing Extreme Fire Risk in California for the Public Utilities Commission:** SIG scientists worked with the California Department of Forestry and Fire Protection (CAL FIRE) to assess the top 2 percent worst fire weather conditions for the entire State of California. In total, SIG scientists simulated over 100 million ignition events around the state of California under extreme historical weather conditions. More information is here <https://www.cpuc.ca.gov/firethreatmaps/> .
- **Lake Tahoe Basin: An assessment of fire hazard/risk in the Wildland Urban Interface (WUI) and Stream Environment Zones (SEZs):** In 2013, SIG completed a fire hazard and risk assessment for the entire Lake Tahoe Basin, with an analysis focused on potential fire behavior in Stream Environment Zones (SEZs) and the wildland urban interface (WUI). The project covered all lands within the Lake Tahoe Basin Management Unit, which included a 231,285-acre LiDAR sample area. The general approach was to develop fire behavior and probability inputs within the Lake Tahoe Basin using LiDAR, WorldView-2 imagery and existing GIS layers.
- **Yosemite National Park Landscape Fuels Treatment Prioritization Project:** SIG worked with staff from the National Park Service (NPS)/Yosemite National Park to develop a risk-based fuel treatment prioritization map for the Park using Arc-Fuels and GIS, which would then drive development of a schedule of work for the Park's fuel management program.
- **California's 4th Climate Assessment:** Fuel Treatments for Forest Resilience and Wildfire Mitigation- For this report, SIG reviewed what is known about the effects of fuel treatments on stored forest carbon, wildfire risk and wildfire emissions in California's forests and summarized geo-spatial data gaps that need to be filled in order to make good fuel treatment decisions that both increase forest resilience and carbon sequestration. The full report is available here <http://www.climateassessment.ca.gov/techreports/forests-wildfire.html>.

### Pusina Experience

27 years of federal and interagency wildland fire and fuels experience. This includes positions as Inyo National Forest (INF) fire management officer, Yosemite National Park (YNP) deputy fire management officer, and YNP and INF fuels and timber program leads/supervisors. Pusina's wildland fire career has been dedicated to protecting communities, natural, cultural, pre-historic, heritage, wilderness, recreation,

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air quality and other values at risk from catastrophic wildfire through aggressive suppression of unwanted wildfires; and proactive, progressive, science-based application of mechanical and prescribed fire treatments, and management of natural ignitions for multiple objectives including suppression/protection *and* resource benefits. All projects and incidents listed include direct coordination with resource management specialists - resource advisors, heritage program leads, biologists, botanists, hydrologists, range managers, etc. to the extent possible.

Inyo National Forest and BLM Bishop Field Office, Mono and Inyo Counties, 2015-2021.

- 2021 Type 2 Dexter (lightning caused) wildfire, managed for protection/suppression objectives. The Dexter - managed by (my) CA Interagency Incident Management Team 14 - had potential to adversely impact Hwy. 395 and the communities of June and Mammoth Lakes. The fire was stopped at the 2019 Springs (lightning caused) fire that I directed to be managed for multiple objectives including resource benefits as well as the Clark and Owens River lightning fires (2016).
- 2021 Sunny Slopes/Crowley Prescribed Fire, Mono County. Served as Type 2 Prescribed Fire Burn Boss to conduct a complex broadcast prescribed burn directly adjacent to the WUI community of Sunny Slopes/Tom's Place which includes privately owned property, residences and INF recreation residences.
- 2019 INF Land Management Plan (LMP) EIS NEPA. Assisted with wildland fire, fuels/timber program portion of the plan including designation of management units, potential operational delineations (POD), wildfire likelihood, risk and impacts to values at risk. Help draft LMP objective language including increased pace and scale of proactive, science-based treatments to restore catastrophic wildfire resilience to vulnerable INF WUI communities and other values at risk.
- 2018 Lions fire (lightning caused), Sierra and Inyo National Forests was initially managed for protection/suppression - to keep the fire from Devils Postpile National Monument, Reds Meadow and Mammoth Lakes - and resource benefit objectives in the Ansel Adams Wilderness. The Lions significantly modified fire spread from the 2021 Creek wildfire into Mammoth Lakes.
- 2018 California Air Resources Board/Great Basin Unified Air Pollution Control District MOU rewrite. Worked with GBUAPCD and CARB to reinterpret Federal Clean Air Act and CA Title 17 health and air quality laws and regulations to allow Inyo NF and BLM Bishop Field Office to conduct more prescribed fire treatments and allow management of natural ignitions for multiple/resource benefit objectives.
- 2012-2022 Fire Behavior Analyst (FBAN) on Type 2 California Interagency Management Team. Worked on multiple, complex wildfires throughout the Western US and adjacent to WUI communities. Predicted wildfire behavior and potential based on fire danger, historic/current weather, vegetation and fuels, topography and previous fires/disturbances/treatments. Helped direct safe, operational actions to protect communities and values at risk based on modeled and observed fire behavior.

Yosemite National Park, Mariposa, Tuolumne, San Joaquin and Mono Counties, 1993-2015

- Provided input to YNP's programmatic EIS/Fire Management Plan NEPA. Helped define core, inner and outer WUI geographic boundaries and hazard fuels reduction treatment target ranges by species and size class based on peer-reviewed science. Determined WUI treatment priorities based on *Fire Return Interval Departure* and proximity to infrastructure, natural (plant/animal) and T&E/Park sensitive species, wilderness, visitor use, air quality and other values.

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- Wrote prescribed fire burn plans and served as complex (Type 1 and 2) burn boss directly adjacent to the WUI communities of Yosemite Valley, El Portal, Foresta, Yosemite West, Hodgdon and Wawona under EIS NEPA. Managed many lighting fires for multiple protection/suppression/resource benefit objectives. These treatments and proactively managed fires intercepted multiple, potentially catastrophic subsequent wildfires including These include:
  - Ferguson (Sierra NF/YNP, 2018)
  - Railroad (Sierra NF/YNP, 2017)
  - Rough (Sequoia Kings Canyon NP/Sierra NF, 2015)
  - Rim (Stanislaus NF/YNP, 2013)
  - Ackerson Complex (YNP, 1996)

1992, Timber cruiser for Mason, Bruce and Girard, consulting foresters

- Conducted stand and forest health and productivity exams and contributed to the forestry portion of an EIS NEPA for the Tongass NF for providing biomass to SE Alaska pulp mills saw logs to Asia.



Comprehensive  
**NEPA Environmental  
Planning Services**  
*to support the  
Eastern Sierra Climate and  
Communities Resiliency Project  
and Future Initiatives*

Prepared for  
Eastern Sierra Council  
of Governments  
Joint Powers Authority

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March 21, 2022



# Attachment B



now



March 21, 2022

Ms. Elaine Kabala  
Executive Director  
Eastern Sierra Council of Governments  
Mammoth Lakes, California 93546  
*Submitted via email: ekabala@escog.ca.gov*

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**RE: Request for Proposals to Provide National Environmental Policy Act Services for the Eastern Sierra Climate and Communities Resilience Project, Pace and Scale Accelerator Program**

Dear Ms. Kabala and Members of the Selection Committee,

The Cardno team is honored to have this opportunity to provide our team's proposal for services to support the Eastern Sierra Council of Government's (ESCOG) efforts to achieve the following goals within the Inyo National Forest and adjacent lands through the implementation of the Eastern Sierra Climate and Communities Resilience Project (ESCCRP):

- Improve and restore forest health and resilience;
- Reduce the risk of high-severity wildfire and impacts on the Town of Mammoth and other community assets;
- Protect water and other valuable resources in two key headwater basins; the Upper Owen's River and the Middle Fork of the San Joaquin River;
- Provide for safer and more effective emergency response; and
- Build the capacity to support the development of a local forest restoration and resilience economy that creates jobs in the Eastern Sierra and increases the scale and pace at which these projects are implemented.

Our team offers proven expertise in the practice areas required by this RFP. We have also highlighted additional areas of expertise (see Organization Chart) to demonstrate our team's full capabilities as an Interdisciplinary Team (IDT) and our ability to address the full suite of resource needs of the ESCCRP and/or future similar projects. Our existing local team located out of the Cardno Bishop office, currently provides engineering, wildlife, botanical, wetland, archaeological, cultural, and tribal resource support to the Town of Mammoth Lakes, Mono County, City of Bishop, Inyo County and the US Forest Service (Inyo NF, Sierra NF, Sequoia NF ). We are currently actively recruiting and hiring staff resources that build capacity for our clients in the Eastern Sierra.

The Cardno Team has a positive track record of planning for and implementing a diverse array of resource and infrastructure projects in the Sierra Nevada. Our environmental and permitting staff work closely with our scientists and engineers beginning at the project initiation and planning stages and continuing through environmental clearance, permit approvals, and implementation monitoring to successful project completion. We seek to clarify project objectives, identify efficiencies in processes, and avoid or minimize potential environmental impacts during project development to avoid potentially costly mitigation and/or monitoring that could otherwise be triggered during environmental review. We understand how to strategically develop measures that do not create unintended consequences with the potential to undermine project objectives and which may even make it impossible to successfully complete the project. We are very familiar with the unique landscapes of the Sierra and most specifically those of the Eastern Sierra.

Based on our understanding of the ESCCRP's project, we have assembled a team to provide the following value-added benefits:

- **Leadership in developing and guiding planning processes with multiple entities** with diverse personalities and missions and in keeping participants on task;
- **Expertise in troubleshooting and preparing environmental clearance documents under NEPA and CEQA for large landscape level projects;**



- Technical resource experts with **strong competency in natural and cultural resources subject areas and the local geography and ecology** to ensure the integration of robust science and defensible conditions assessments;
- **Staff well versed in developing monitoring plan strategies** that are implementable, support the purpose and need of the project, and at the same time insure improvements where needed to meet performance standards; and
- Staff committed to developing and implementing highly effective, project-tailored, interdisciplinary, collaborative **processes based on past working relationships with the US Forest Service, non-profit organizations, local and state agencies, Native American Tribes, and other stakeholders.**

Our principal-in-charge, Katie Ross-Smith PhD, project manager Coleen Shade, and deputy project manager Jennifer Chase have a combined 70 years of working on resource assessments, NEPA/CEQA environmental clearance and projects in the Sierra Nevada. All three are skilled and experienced at leading interdisciplinary, multiple-entity teams and providing the leadership to keep IDT individuals engaged and aligned with the critical path to success. It is clear the partners supporting the ESCCRP have the passion and commitment to this bold undertaking to see it through to its success. The Cardno team wants to assure you that we, too, want to be your partners in supporting this project with the same level of passion and commitment.

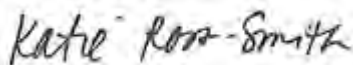
For the efforts associated with this RFP, we have assembled a highly qualified, multidisciplinary team with a full suite of environmental planning, multi-agency permitting experience and ecologically based project success. Along with Dr. Ross-Smith, Ms. Shade and Ms. Chase our core team includes Corinne Munger (Cardno Field Efforts Lead); Nanette Hansel (Ascent, NEPA Co-Lead); Kate Gray (Stantec, NEPA Co-Lead); and Linda Leeman (Ascent, Special Studies Lead). We have included an Organization Chart, a Directory of the Cardno Team Members, and skills matrix in the attached appendices including individual resumes. Beyond these individuals, our team is also supported by a deep bench of 300 environmental professionals across California and Nevada who can be called upon should additional capacity or unforeseen technical needs arise.

The Cardno Team has the capacity, availability, expertise, and commitment to commence and perform work as soon as we are given the notice to proceed. Our team individually and as teaming partners have a track record for maintaining schedules with a focus on quality, budget, and safety. Our local presence, experience, understanding, and flexibility make the Cardno Team a perfect match to provide NEPA planning, capacity building, science integration, and IDT leadership.

Thank you in advance for the opportunity to present our proposal. If you have any questions regarding our qualifications, please contact Dr. Ross-Smith or Ms. Shade at the phone and email addresses provided below. We look forward to working with the Partnership on this extremely important project.

Sincerely,

**Cardno, now Stantec**



Katie Ross-Smith, PhD  
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### 1. Understanding of Scope of Work

The proposed ESCCRP is a landscape scale forest restoration project encompassing 56,000 acres in the Eastern Sierra. Successful implementation of this project includes restoring forest structure, composition, reduction in density and forest fuels; increasing species and age diversity; and increasing resilience to wildfire, draught, and insect mortality (climate change resilience). The Cardno team understands the ESCCRP's goals reflect the need for accomplishing forest health and resiliency projects at a pace and scale not currently being realized in the Eastern Sierra. We also understand that the ESCCRP presents an opportunity to build environmental planning capacity in the Eastern Sierra through an IDT based in the Eastern Sierra to support local, federal, and non-profit partners plan, analyze, permit, and implement similar future projects.

The RFP identifies two distinct deliverables for the project. The first is the staffing and managing of a full IDT capable of conducting the necessary studies, reports, and environmental analysis for National Environmental Policy Act (NEPA) environmental clearance covering the entire 56,000 acres. The second deliverable entails conducting the surveys needed for the 10,000-acre priority areas to prepare them for immediate implementation based on the completed NEPA document.

Cardno has built a comprehensive team to support the ESCCRP and the future needs of the over-arching Eastern Sierra Pace and Scale Accelerator Program. Our internal team includes resource specialists based out of the Cardno Bishop Office in addition to drawing from our deep bench of Cardno-Stantec environmental scientists with extensive experience working in the Eastern Sierra on infrastructure, recreation, forest, and vegetation management projects. Cardno also welcomes to our team **Ascent Environmental and SE Group** to bring specific condition-based NEPA experience they have gained while leading the NEPA clearance effort for both the Tahoe-North Forest Health Project and the North Yuba Forest Resiliency Project. The Lake Tahoe based office of Design Workshop is another member of our team. They bring years of project experience in the Sierra Nevada where they have led large recreation planning and open space efforts integrating climate and community resiliency with forest restoration. **Design Workshop** will lead, with support from **SE Group**, the USFS visual assessment process. Included on the Cardno Team is also the **Sierra Business Council (SBC)** to support public engagement and an optional service support in the area of biomass disposal strategies. A Sierra Nevada region wide "triple bottom line", not-for-profit organization, SBC provides capacity to communities in the practice areas of Sierra climate change/adaptation, GHG inventories, biomass strategies, business incubator/ support services, and policy development locally and at the state level to support local Sierra communities. In addition to the staff specialist in forestry and air quality the Inyo National Forest brings to this project, the Cardno Team also includes Kevin Whitlock RPF (**Under the Trees**) to support any optional services that may be needed in the practice areas of forestry, resilience, and forest economics. A staff directory and skills matrix along with individual resumes for our topic leads and support professionals are attached as appendices to this proposal.

The NEPA environmental clearance for this project will employ a *conditions-based* approach. The intent is to create efficiencies in the ability to increase the pace at which projects are implemented across larger landscape scales. An initial 10,000 acres will be identified by the USFS and its partners for the first round of high priority surveys to be conducted. These surveys will inform the condition-based parameters for the 56,000-acre project area and assist with developing condition-specific management activities and resource protection measures to be employed. In this manner the NEPA clearance process and a Record of Decision (ROD) can be achieved in an abbreviated time because there is no need to survey the entire project area prior to the NEPA decision. Specific survey needs based on conditions found will dictate survey requirements prior to project implementation phasing. In summary, the ESCCRP is seeking an approach that has flexible yet detailed prescriptions for predictive conditions across a diverse landscape for which the NEPA analysis can adequately assess potential impacts.

The Cardno Team recommends employing a project management tool, the Study Plan, that is currently being used as a guiding document for the consultant team and the North Yuba Partnership for a large landscape project on the Tahoe National Forest. The project is currently being led by Ascent Environmental with support from SE Group. The Study Plan is an administrative approach to meet the objective of producing a technically sound, legally defensible NEPA document that is based on accepted



and expected scientific analyses and methodologies, and presents a strategy for ensuring that comprehensive and thorough analyses are completed for the ESCCRP Environmental Assessment (EA). The purpose of this Study Plan is to ensure that all parties involved – the Cardno Team, Forest Service, ESCOG, Whitebark Institute Project Manager, other partners and stakeholders will work with consistent information agreed upon by all parties.

This Study Plan includes information related to the following:

1. Roles, Responsibilities, Expectations, and Deliverables
2. Purpose and Need
3. Description of Alternatives, including Project Design Criteria/Mitigation Measures
4. Analyses
5. NEPA Process and Schedule

## 2. Technical Approach

Working under the Authority of the USFS, the Cardno's Project Manager and Field Survey Lead will coordinate directly with the Inyo National Forest (INF) to schedule and conduct all necessary environmental surveys for NEPA compliance using the condition-based planning approached described in the RFP. We will work with the INF to determine applicable land and resource management plan components and confirm compliance with the resource management plan features for all assessments and surveys to be conducted. The Cardno Team will use the data and research gathered to recommend management requirements or proposed action modifications or alternatives.

The Cardno Team has conducted resource assessments under many different scenarios within the Sierra Nevada, including the INF. Cardno's biologists and cultural resources specialists have collectively completed desktop reviews and on-site surveys across tens of thousands of acres on USFS managed lands in the Sierra Nevada. From within communities adjacent to Wildland Urban Interface (WUI) zones, to FERC project boundaries for hydroelectric projects, to conducting resource surveys for the John Muir Trail realignment, Cardno's field crews are experts in Sierra Nevada natural and cultural resources and are well-versed in the surrounding environmental and geographic challenges. Current efforts include field reconnaissance and surveys to inform an Environmental Impact Statement (EIS) for The North Yuba Partnership Forest Resiliency Project (Ascent). The detail for these projects and other project examples can be found in the appendices attached to this proposal.

The following provides a short summary of our proposed approach for each of the requested deliverable service areas.

### Task 1: Botanical Assessment

The Cardno Team botanists will conduct a desktop review of existing data to identify special-status plant species, other sensitive botanical resources, and invasive plant infestations known or with potential to occur in the project area. Botanists will evaluate the current Forest Service Region 5 Regional Forester's lists of sensitive species for Inyo National Forest (INF). In addition, we will review: Forest Service survey and GIS data from the Natural Resource Information System (NRIS) database; USFS Region 5 EVeg land cover data for habitat types within the project area; a list of federally proposed, candidate, threatened, and endangered species that may occur in the project region obtained from the U.S. Fish and Wildlife Service (USFWS) IPaC system; the California Natural Diversity Database; California Native Plant Society's (CNPS's) Online Inventory of Rare and Endangered Plants; the California Invasive Plant Council database and CalWeed Mapper; and other data relevant to the project area.

The Cardno Team botanists will use the results of the desktop review to identify areas where reconnaissance surveys would be needed. Field surveys would be focused in habitat types likely to support special status plant species and where project activities may occur.. Some special-status plants known from the region only occur within microhabitat types where vegetation treatments would not occur, such as boulder and rock fields, scree



and sandy subalpine areas, wetlands, alkaline meadows and seeps, and other non-forest areas. Because these areas would be avoided and protected during project implementation, they would be excluded from botanical surveys. Floristic botanical surveys would be completed during appropriate bloom periods in proposed priority treatment areas within habitat types that could support special-status plants. During botanical surveys, natural communities within priority treatment areas would be assessed and classified using the methods described in the Manual of California Vegetation Online (Sawyer et al 2009, CDFW 2022).

Based on the desktop review of existing information and the results of the initial botanical and habitat assessments in priority areas to be conducted in 2022, a Summary Survey Report with GIS-Based maps will be prepared. Our team of botanists will draw on recent experience working with INF on the Mammoth Base Land Exchange (Ascent project) and the John Muir Trail Project (Cardno) and will work closely with INF technical staff to ensure that all desired information is included. The technical reports will be prepared in INF's preferred format. Per agency consultation, the Cardno Team will propose efficiencies in combining documents as appropriate. The Biological Assessment/Biological Evaluation (BA/BE) will summarize the proposed action and analyze effects of project implementation on federally listed and Forest Service sensitive plant species and support any consultation with USFWS for listed plants, if needed. The Botanical Resources Assessment will evaluate potential effects of the proposed action on special botanical resources not covered in the BA/BE, including USFS watch list species, special management areas, and vegetation communities considered to be "special habitats" by USFS. The Weed Risk Assessment will address the potential for project implementation to result in the establishment or spread of invasive plant species on USFS lands. INF technical staff will provide one review of the draft reports and the Cardno Team will prepare final reports based on comments received.

### Deliverables

- Desktop Review; Vegetation Mapping and Habitat Assessments in priority areas
- Summary Survey Report and GIS Map Book
- Biological Assessment/Biological Evaluation (BA/BE) for Plant Species
- Botanical Resources Assessment
- Invasive Plant/Noxious Weed Risk Assessment

### Task 2: Archaeological Assessment

The Cardno Team will conduct a desktop review background research for the Area of Potential Effects (APE), we will mobilize a four-person field crew to the town of Mammoth Lakes, California to complete an archaeological assessment for the 10,000 priority acres within 20 minutes of the town. We assume crews will complete 30 acres of survey per person, per day and document one heritage resource per 200 acres. Field work will be conducted under the appropriate permits and permission from the USFS. All field practices will meet the Secretary of Interior's Standards and follow all INF pedestrian survey guidelines. Non-intensive reconnaissance survey will be conducted for areas covered by dense vegetation or steep slopes.

The Cardno Team will record all newly discovered prehistoric, ethnographic, and historical heritage resources encountered within and directly adjacent to the project area(s), and re-record existing site records based on current conditions observations. Heritage resources will be recorded using USFS Region 5 standards. Heritage resources will be recorded or updated on appropriate California Department of Parks and Recreation (DPR) 523 forms and documented using a GPS receiver with sub-meter accuracy. Cardno will complete a NEPA level Archaeological Project Effects Analysis Report and will coordinate with the INF to consult with the State Historic Preservation Office (SHPO) for concurrence on eligibility and effects findings.

### Task 3: Wildlife Habitat Assessment

Similar to the Botanical Assessment task (Task 1), our Cardno Team biologists will review the data sources relevant to wildlife species and at-risk species habitat in the project area. Our biologists will conduct habitat mapping and perform wildlife surveys in the INF identified priority areas. A Summary Survey Report with GIS-based maps will be provide to the INF. We will work closely with INF technical staff on the preferred content and format of the BA/BE which will summarize the proposed action and analyze effects of project implementation on federally listed and Forest Service Sensitive wildlife species. INF will be able to use the BA



to consult with USFWS for effects to federally listed species. We expect that take of listed species can be avoided and an Incidental Take Permit will not be required. We will also prepare a Migratory Bird Evaluation Report that addresses the potential effects on USFWS Bird Species of Conservation Concern and, if required by INF, a Management Indicator Species report. The Cardno Team biologists will also include a habitat evaluation for CDFW Species of Conservation Concern and State listed species, as requested in the RFP. INF technical staff will provide one review of the draft reports and the Cardno team will prepare final reports based on comments received. The following deliverables will be prepared for submission to the CDFW Grant Manager:

### Deliverables

- Desktop Review and Survey Efforts for Priority Areas.
- Summary Survey Report and GIS Map Book.
- Habitat evaluation for CDFW Species of Conservation Concern and State listed species
- Biological Assessment/Biological Evaluation (BA/BE) for Wildlife Species
- Migratory Bird Evaluation Report

### Task 4: Recreation Assessment

The Cardno Team will provide an analysis of recreational facilities and activities within the project area using existing GIS data, local recreation planning documents (e.g., the Mammoth Trails System Master Plan), and other information. This evaluation will identify facilities and/or activities that have the potential for beneficial or adverse effects from wildfire, as well as potential effects to recreation that could result from the Project. This will include preliminary strategies for ensuring Project access points are thoroughly decommissioned and camouflaged, where needed to prevent post-project vehicle use, as well as preliminary strategies for recreational/trail improvements that could benefit from the project. The Cardno Team will prepare a Recreation Assessment that includes existing conditions, opportunities for recreation integration with the project, and will prepare a Recreational Effects Analysis for the Project.

### Deliverables

- Recreation Assessment

### Task 5: Hydrology and Soils Assessment

The Cardno Team will initiate the task of identifying and mapping waterways, wetlands, meadows, springs, and other water features with a desktop review, using GIS, aerial photos, USFWS National Wetland Inventory Data, USGS National Hydrography Data, INF landcover data, and other methods, as applicable. Field verifications of aquatic resources will be completed, as needed, in conjunction with botanical and wildlife resources surveys. The mapping of aquatic resources will include the delineation of waterbody buffer zones using Lahontan Water Board definitions. Based on mapped aquatic resources and buffers, the Cardno Team will develop a preliminary list of management recommendations, project design features, and alternatives for protecting water and soil resources. The Cardno Team will submit to the CDFW Grant Manager the Hydrology & Soils Assessment which will include but not limited to:

- Delineate riparian conservation areas using GIS (using definitions in the Inyo National Forest land management plan)
- Review water bodies in analysis area to record any special designations (303d list, special status, designated Wild and Scenic Rivers)
- Determine applicable INF land and resource management plan components and review for compliance and development of project design features
- Complete Cumulative Watershed Effects analysis using the Equivalent Routed Area method
- Prepare a Watershed Report that analyzes project effects to water quality, water temperature, stream morphology, soil erosion and productivity, incorporating the results of the previous bullets
- Prepare a Timber Waiver application and consult with the Lahontan Regional Water Quality Control Board.



### Task 6: Environmental Assessment, NEPA Scoping and Decision Process Facilitation

The Cardno Team will lead preparation of an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA)(42 USC 4321-4347), the Council on Environmental Quality's Regulations Implementing NEPA (40 CFR 1500-1508), Forest Service Manual 1950, and Forest Service Handbook 1909.15. The EA will describe and evaluate site-specific management activities using a condition-based approach. To initiate the NEPA process, the Cardno Team will prepare a scoping notice, distribute the notice to stakeholders, facilitate a public scoping meeting, organize public comments, and identify significant issues raised in comments. The Cardno Team also will prepare a scoping summary report that will be made available with the EA.

The EA will include: a brief description of the proposed action and a no action alternative; a discussion of direct, indirect, and cumulative effects; and a list of agencies and persons consulted. Following public review of the Draft EA, the Cardno Team will support INF in addressing and responding to substantive comments in a Response to Comments document. The EA will be supported by a finding of no significant impact (FONSI) documented in a decision notice (DN) prepared by the Cardno Team and signed by the INF Responsible Official. SE Group will direct the team as it relates to organizing the Project Record on SharePoint to support the decision. In the event objections are filed, the Cardno Team will assist the objection review team, as needed, with transmittals and post-objection documents. If based on the analysis it is determined that an EIS is required, a scope and budget amendment would be required.

#### Deliverables

- Draft and final scoping notice
- Scoping summary report
- First Administrative Draft EA, Screencheck Draft EA, Public Draft EA and notification letter
- Draft and final Response to Comments document
- Draft and final DN and FONSI
- Project record materials posted to the project SharePoint site
- Transmittals and post-objection documents, as needed.

### Task 7: Monitoring Plan

The monitoring approach for ESCRRP will be designed to track outcomes associated with implementing the proposed action and provide for adaptive management in cases where intended outcomes are not being achieved. As such, the monitoring approach focuses on two key questions: (1) Were actions implemented as planned and intended? (implementation monitoring) and (2) Were actions effective in accomplishing intended outcomes based on treatment objectives and management goals? (effectiveness monitoring).

The monitoring/implementation plan will be developed by the Cardno Team in collaboration with the INF IDT and include the following: (1) baseline monitoring requirements consistent with the *Land Management Plan for the Inyo National Forest*; (2) a description of interagency coordination and stakeholder responsibilities for implementing the plan; (3) monitoring goals, guiding questions, and indicators used to determine whether actions were implemented as intended; (4) adaptive management strategies and actions (such as modifying treatment types and/or methods, or refining or reviewing treatment target conditions); and (5) funding. Proposed adaptive management actions will be analyzed in the environmental analysis in Task 6.

#### Deliverables

- Draft and final Monitoring/Implementation Plan

The Cardno Team will lead the work to establish additional baseline monitoring requirements, in addition to the already established monitoring as described in the USFS Land Management Plan. The Cardno Team will work with the Project Manager and USFS partners to maximize the learning opportunity the ESCRRP provides through the Monitoring Plan development. The Cardno Team will work with USFS to determine how the standard monitoring required covers the project area and develop a Monitoring Plan that will include but is not limited to:



- Identify established protocols and monitoring efforts by partners, adjacent landowners, and collaborating agencies.
- Work with USFS to implement Monitoring Guidance.
- Ensure the monitoring developed is within the technical, financial, and staffing capability of the USFS and partners.
- Develop performance measures to be included with Monitoring Plan.

The Cardno Team will work with the USFS to determine what additional monitoring specific to the ESCCRP will be required under the terms of the USFS Land Management Plan, to include the development of monitoring protocols and any other requirements necessary for a complete Monitoring Plan.

### Task 8: CEQA Planning Assessment

In consultation with the project partners and stakeholder agencies regarding local and state funding sources and required approvals, the Cardno Team will recommend the appropriate documentation for purposes of compliance with CEQA. The recommendation will take the form of a brief memorandum identifying the appropriate lead agency and summarizing findings and recommended approach. The memorandum will include a draft scope of services and budget for CEQA document preparation; whether that could include documentation supporting use of the SB 901 exemption for “prescribed fire, thinning, or fuel reductions projects” undertaken on federal lands to reduce the risk of high-severity wildfire that have been reviewed under NEPA (if still in effect at the time); another CEQA exemption; or higher level CEQA document.

#### Deliverables

- Draft and final CEQA approach memorandum, including draft scope of services and budget for CEQA document preparation

### 3. Qualifications of Proposed Personnel

Our organization chart, attached in Appendix A, lists our key leads and resource team members. We purposely have not identified business associations within the organization chart because we are one integrated team. However, our Directory of Team members list our team members by Firm association as does the Project Map highlighting relevant projects. The team Cardno has compiled for this project are individuals associated with our local Bishop office, our Northern California offices in Sacramento and South Lake Tahoe, and in our Reno, Nevada office. Our offices provide the intimate client experience you expect from a smaller company, while at the same time providing a deep bench that can be called upon if an unexpected technical issue arises. Our Northern California and Nevada team has earned a reputation for helping find innovative solutions to project challenges to ensure timely and effective project deliverables. In addition, Cardno has a long-standing relationship with the USFS in both environmental clearance and implementation of recreational facility projects and forest/vegetation management projects throughout the Sierra Nevada in multiple national forests. Our team understands the USFS’s culture, its processes, and key objectives. This background ensures an effective and efficient consultation partnership with the ESCG.

### 4. Past Performance

Please refer to our project example descriptions we have included and attached in Appendix B. In order to demonstrate the Cardno Team’s collective experience we have provided example summaries of our past performances conducting NEPA compliance efforts; preparing resource reports; conducting large landscape resource surveys; working successes with the USFS and other federal, state and local agencies; and our broad experiences of working in the Sierra Nevada forest ecosystems. Our project examples and a map highlighting project locations across the Sierra Nevada are attached in the appendices to our proposal.



### Cost Proposal

The cost to complete the scope of services is presented in the table below, including cost per task. It should be noted that the cost proposal reflects our current understanding of the project and requested services. Cardno will review and adjust the scope of services, underlying assumptions, cost details, and subconsultants, as needed, with the JPA members and INF at the onset of the project. In accordance with the RFP, work will be completed and billed on a time and materials basis, not to exceed the contracted budget.

TASKS		ESTIMATED COST
Task 1	Botanical Assessment <sup>1</sup>	\$332,000
Task 2	Archaeological Assessment <sup>2</sup>	\$500,000
Task 3	Wildlife Habitat Assessment <sup>3</sup>	\$165,000
Task 4	Recreation Assessment <sup>4</sup>	\$75,000
Task 5	Hydrology and Soils Assessment <sup>5</sup>	\$57,400
Task 6	Environmental Assessment, NEPA Scoping, Notice of Decision <sup>6</sup>	\$350,000
Task 7	Monitoring/Implementation Plan	\$60,000
Task 8	CEQA Planning Assessment	\$15,000
Task 9	Meetings, Facilitation and Coordination	\$86,400
Task 10	Project Management	\$64,480
<b>TOTAL</b>		<b>\$1,705,280</b>

**Cost Assumptions:**

1. Cost assumes approximately 30 days of surveys for 6 people, plus time for survey planning, logistics, and coordination and direct costs for meals and lodging.
2. Cost assumes approximately 65 days of surveys for a 4-person field crew, plus time for survey planning, logistics, and coordination and direct costs for meals and lodging. Assumes 50 sites will need to be recorded.
3. Cost assumes approximately 20 days of surveys for a 4-person field crew, plus time for survey planning, logistics, and coordination and direct costs for meals and lodging.
4. Cost assumes approximately 10 days to complete desktop review and site reconnaissance plus time for survey planning, logistics, and coordination and direct costs for meals and lodging.
5. Cost assumes that draft reports will be submitted in electronic format and one round of review will be required. One set of consolidated comments from all reviewers will be provided electronically to the Cardno Team. One meeting will be scheduled to discuss the comments and follow up clarification, if needed, would occur via telephone or email. The Cardno Team will prepare final reports based on the comments received.
6. Cost assumes that the proposed action is consistent with the Forest Plan and no amendments will be required and that a no action alternative (and no other action alternatives) will be evaluated. The budget assumes all deliverables will be submitted in electronic format and up to 40 hours of technical staff time will be needed to respond to substantive comments on the Public Draft EA. Any revisions to the Draft EA that result from responding to comments will be presented as excerpts with changes shown in redline and strikethrough and a fully revised EA will not be needed.





# Appendix A

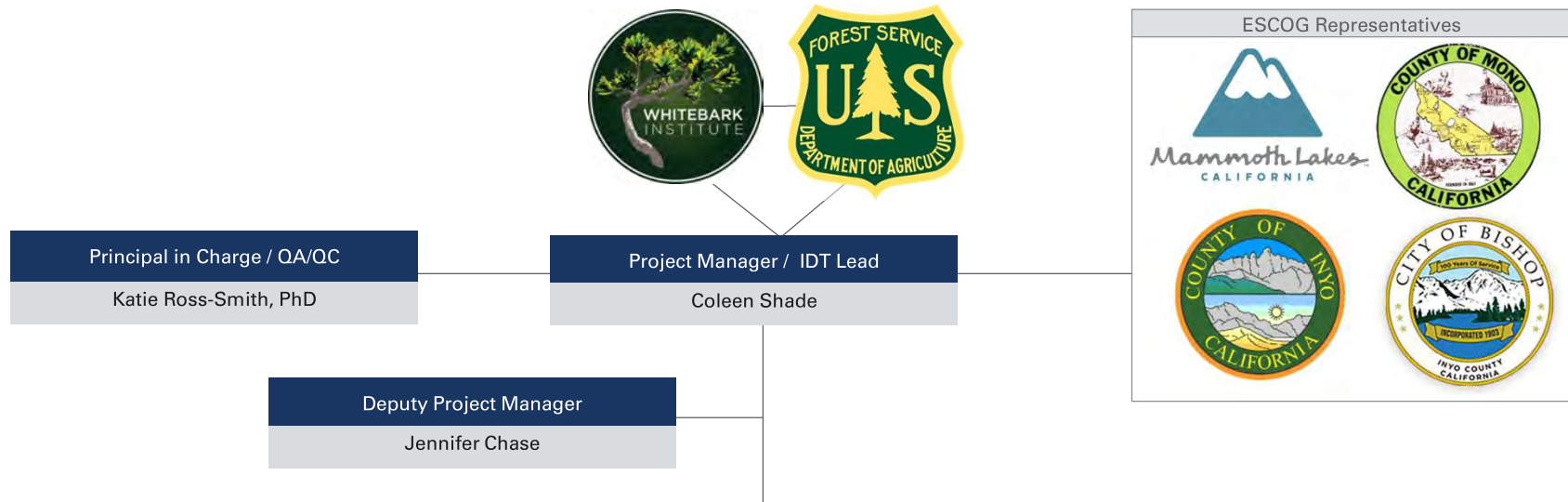
STAFF ORGANIZATION, DIRECTORY,  
AND RESUMES



now



# Attachment B



Field Efforts	Special Reports	NEPA/CEQA **	Public Engagement & Facilitation
<b>Lead: Corinne Munger</b> Steve Henderson – Terrestrial Resources Rick Evans – Aquatic Resources Sarah Hoff Phillips – Botanical/Wetland Resources Crystal West – Cultural Resources Susan Talcott – Cultural Resources Claire Archer – Soils and Hydrology Stephanie Grigsby – Recreation Resources	<b>Lead: Linda Leeman</b> Steve Henderson – BA/BE, MBTA Report Tammie Beyerl – WRA Crystal West – Cultural Resource Inventory* Melanie Greene – CWE, Watershed Report, Timber Waiver Application Stephanie Grigsby – Recreational Assessment	<b>Co-Lead: Nanette Hansel / Co-Lead: Kate Gray</b> Adam Lewandowski – SB 901 Steve Henderson – Biological Resources Melanie Greene – Soils and Hydrology Crystal West – Cultural Resources Ashley Smith – Visual Resources Stephanie Grigsby – Recreation/Open Space Resources Linda Leeman – Monitoring Plan	<b>Lead: Coleen Shade</b> Lisa Beutler – Stakeholder Facilitation Kristin York – Public Engagement

Optional Planning Support				
<u>Recreation Amenities/Trails</u> Brian McRae Stephanie Grigsby Steve Noll Ben Fish	<u>Biomass Alternatives Development</u> Shannon Mahoney Steve Frisch	<u>Forestry/Forest Economics</u> Kevin Whitlock	<u>Transportation/Circulation</u> Sara Hawley	<u>Visual Simulations</u> Ben Fish

\* Assumes consistency with Region 5 Programmatic Agreement evaluation report is not required and resources can be flagged and avoided.

\*\* Air quality/climate change and cultural/fire and fuels analyses to be completed by Inyo National Forest.

# Attachment B

Team Directory	Skills																									
	NEPA Planning Knowledge & Experience	CEQA Planning Knowledge & Experience	Landscape Scale Forest Restoration	Interdisciplinary Project Management	Eastern Sierra Ecosystem Knowledge	Natural Resource Management	Forest and Watershed Restoration	Meadow Restoration Planning and Implementation	Working relationship with USFS and the Inyo NF	Public Engagement and Meeting Facilitation	Botany	Archaeology, Cultural and Tribal Resources	Aquatics/Terrestrial Resources Surveys, Reports and Analysis	Sage Grouse Habitat Management	Public Lands Recreation Planning and Implementation	Hydrology	Soil Science	GIS Mapping and Data Analysis	Mitigation and Monitoring Plan Development	Drone Survey Capabilities	Transportation/Circulation/Noise/Air	Forest Economics	Biomass Strategies	Climate Adaptation and Mitigation	Visual Resource Assessment	Engineered Plans, Specifications & Estimates
<b>Cardno-Stantec</b>																										
Katie Ross-Smith, PhD	▲	▲		▲	▲	▲	▲	▲	▲	▲		▲			▲											
Coleen Shade, AICP, CEP	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲			▲	▲				
Jennifer Chase	▲	▲		▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲				▲				
Sarah Hoff-Phillips			▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Crystal West	▲	▲		▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Corinne Munger	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Meghan Oats	▲	▲		▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Claire Archer, PhD				▲	▲										▲	▲	▲									
Susan Talcott, PhD	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Shawn Fackler, MA, RPA	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Ronald Johnson, RPA	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Kate Gray	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Shannon Mahoney, PhD, RPA		▲	▲	▲	▲							▲			▲	▲	▲	▲					▲			
Kendra Ryan	▲	▲		▲	▲	▲									▲	▲	▲	▲						▲	▲	
Grant Schmitz				▲	▲	▲									▲	▲	▲	▲								▲
Michelle Hochrein	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Melanie Greene, AICP, CPESC, QSD/P	▲	▲		▲	▲	▲	▲	▲	▲	▲		▲			▲	▲	▲	▲								
Lisa Beutler			▲	▲	▲	▲	▲	▲	▲	▲					▲	▲	▲	▲								
Brian McRae, PE	▲	▲		▲	▲	▲	▲	▲	▲	▲					▲	▲	▲	▲								▲
David Martinez	▲	▲		▲	▲	▲	▲	▲	▲	▲					▲	▲	▲	▲								
Rick Evans	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲	▲	▲	▲								
Erin Elliott			▲	▲	▲	▲	▲	▲	▲	▲					▲	▲	▲	▲								▲
Matthew Tomaszewski			▲	▲	▲	▲									▲	▲	▲	▲								▲
Harlan Dewey						▲						▲														▲
<b>Ascent</b>																										
Nanette Hansel	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲									▲		▲
Sean Bechta	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											
Jessica Mitchell, AICP	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											▲
Adam Lewandowski, AICP	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											▲
Linda Leeman	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											▲
Steve Henderson	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											▲
Emilie Zelazo	▲	▲	▲		▲	▲	▲	▲	▲	▲					▲											▲
Tammie Beyerl	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											▲
Tiffany Lunday	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											▲
Lisa Merry	▲	▲	▲		▲	▲	▲	▲	▲	▲					▲											▲
Phi Ngo		▲	▲	▲	▲	▲	▲	▲	▲	▲					▲											▲
Zach Miller, AICP	▲	▲	▲		▲	▲	▲	▲	▲	▲					▲											▲
Dimitri Antoniou, AICP	▲	▲	▲		▲	▲	▲	▲	▲	▲					▲											▲
<b>Design Workshop</b>																										
Stephanie Grigsby, PLA, AICP, LEED GA				▲	▲										▲										▲	▲
Steve Noll, PLA, AICP				▲	▲										▲											▲
Ben Fish, PLA, LEED AP, CDT				▲	▲										▲											▲
<b>SE</b>																										
Ashley Smith	▲		▲	▲	▲	▲	▲	▲	▲	▲					▲	▲	▲	▲								▲
Anita Manitiuss	▲		▲	▲	▲	▲	▲	▲	▲	▲					▲	▲	▲	▲								▲
<b>Sierra Business Council</b>																										
Steve Frisch																										
Kristin York																										
<b>LSC</b>																										
Sara Hawley	▲	▲		▲	▲										▲											▲
<b>Under the Trees Forest</b>																										
Kevin Whitlock			▲	▲	▲	▲	▲	▲	▲	▲					▲											▲

# Katie M. Ross-Smith, PhD

## Current Position

Natural Resources  
Northern CA Business  
Unit Lead/ Regional  
Senior Principal

## Discipline Area

- > Hydroelectric Licensing
- > Stream and Wetland Restoration
- > Riparian flows
- > Riparian Ecology
- > Vegetation Community Mapping
- > Fluvial Geomorphology
- > Floodplain Retention Dynamics
- > Environmental Assessments & Studies
- > Sediment Transport Studies
- > Hydrology Analysis
- > Data Analyses
- > Project Management

## Years' Experience

25

## Joined Cardno

2003

## Education

- > PhD, Environmental Sciences, University of Virginia, Charlottesville, 2003
- > MS, Environmental Sciences University of Virginia, Charlottesville, 1999
- > BA, Environmental Studies, Whittier College, 1995

## Summary of Experience

Dr. Ross-Smith has more than 17 years of experience in environmental consulting and 25 years of technical experience in the field of environmental sciences and natural resource management. She has provided technical expertise and management for private sector, government, and NGO clients for a variety of environmental, water resource, and restoration projects. Dr. Ross-Smith is an ecologist with a strong interdisciplinary background with an emphasis on riparian and riverine ecosystems. Her experience includes projects related to hydroelectric licensing, river restoration and revegetation, and watershed assessments. She has directed and authored numerous technical studies and reports in support of projects that require multidisciplinary approaches for watershed conditions assessments and impact analyses of terrestrial and aquatic resources. She manages large, multiyear studies assessing resource conditions; evaluating impacts; and developing protection, mitigation, and enhancement measures. She manages multiyear monitoring projects to assess changes in riparian and channel conditions over time in response to new flow regimes and develop restoration options. Her areas of technical expertise include quantitative riparian/meadow field studies; riparian limiting factor analysis; riparian, wetland, and geomorphic condition assessments; and development of recommendations to improve habitat and channel conditions.

## Significant Projects

*Project Manager / Technical Lead – National Park Service, Merced River Restoration – Yosemite Valley, CA*

Dr. Ross-Smith was part of team, composed of scientists and engineers from UC Santa Barbara, UC Davis, Sacramento State, and Cardno, that provided scientific and design support for restoration efforts in east Yosemite Valley being considered by the NPS. The team evaluated past and future behavior of the river, given the potential management prescriptions for riparian areas that attempt to balance recreation use while meeting the Wild and Scenic River objectives, and under potential climate change scenarios. The Cardno team is also providing guidance to the National Park Service on site-scale riparian restoration projects on the Merced River through Yosemite Valley, including engineering and revegetation planning, design, and implementation. To date, the Cardno team has designed and implemented eight restoration projects, including at Housekeeping Bridge and Swinging Bridge, popular recreation locations within the Park.

*Project Manager – PG&E Phoenix Hydroelectric Licensing Project – Central Sierra Nevada, Tuolumne County, CA*

Dr. Ross-Smith is the project manager for the relicensing of PG&E's Phoenix Hydro Project. She works closely with the team, assisting with strategic and process planning; stakeholder collaboration; preparation of license applications and environmental document; and negotiations of new license conditions and development of management and monitoring plans. In addition, she is the technical manager for the wildlife, botanical, and riparian disciplines, including reporting, and preparation of appropriate PM&Es.

*Process and Strategic Support / Terrestrial Resources Lead – PG&E Kerckhoff Hydro Licensing Project – Central Sierra Nevada, Fresno/Madera Counties, California*

Dr. Ross-Smith is the terrestrial resources lead and is providing process support for the relicensing of PG&E's Kerckhoff Project. Her responsibilities include strategic and planning; agency consultation; technical support for terrestrial and flow-related resources,

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evaluation, and PM&E development and stakeholder collaboration; and preparation of the relicensing documents.

*Project Manager / Technical Lead – PG&E Mokelumne River Hydroelectric Project – Amador, Alpine, and Calaveras counties, CA*

Dr. Ross-Smith led 2016 and is leading 2021 riparian monitoring in the Mokelumne River watershed. Monitoring included a combination of low-altitude helicopter vegetation mapping, quantitative data collection, and photo point documentation along 18 stream reaches. The objectives were to identify the effects of new flows on riparian vegetation in order to facilitate adaptive management and to determine if the objectives are being met. She led preparation of the technical report and presented the results at a SEMP meeting.

*Senior Technical Support – Meeks Meadow Restoration Planning – Tahoe Basin, CA*

In partnership with the U.S. Forest Service (USFS) and the Washoe Tribe, Cardno developed restoration plans for a 300-acre conifer-invaded meadow at Lake Tahoe. Dr. Ross-Smith provided senior technical support in development of the monitoring plan.

*Senior Consultant – PG&E Spring Gap-Stanislaus Hydroelectric Project – Central Sierra Nevada, Tuolumne County, CA*

For PG&E, Dr. Ross-Smith manages a riparian restoration and stream bank stabilization project at Kennedy Meadows on the Middle Fork Stanislaus River. The project involved development and implementation of focused studies; preparation of a restoration project plan and design report using a combination of bioengineered techniques and revegetation to stabilize banks, restore the riparian corridor, and enhance the aquatic habitat. Cardno assisted with the permitting (i.e., CEQA; CWA Sections 401 and 404; and CDFW Section 1600), provided restoration engineering and revegetation oversight, monitoring before and during construction, and post-construction maintenance and monitoring..

*Technical Lead – PG&E Rock Creek-Cresta Hydro Project – Sierra Nevada, CA*

Dr. Ross-Smith is providing technical support to PG&E on the Rock Creek-Cresta reaches for establishing instream flows that will support all beneficial uses on the NF Feather River. For riparian resources, she is assisting with development of a new flow regime to discourage establishment of dense woody riparian vegetation within the channel margins.

*Technical Lead / Senior Consultant – PCWA Middle Fork American River Project, Integrated Licensing Process – Placer County, CA*

Dr. Ross-Smith led riparian studies on more than 100 river miles in the Middle Fork American River watershed. She prepared the riparian study plan with stakeholder collaboration. The field studies included vegetation mapping, quantitative data collection, and tree core dating of riparian species on surveyed transects along which stage-discharge relationships were developed. Flows were related to various riparian attributes, which were used to evaluate the condition of riparian resources and informed development of new flows. She also authored the riparian monitoring plan included in the license application. Dr. Ross-Smith also authored or provided technical review of numerous other aquatic resource reports and sections of the environmental impact report, including instream flow, fish population, macroinvertebrate, geomorphology, water quality, water use, and fish passage.

*Riparian and Meadow Lead – Big Creek Strategic Alternative Licensing Project – Central Sierra Nevada, CA*

Dr. Ross-Smith led riparian and meadow studies for SCE's relicensing of multiple hydropower facilities and diversions. She led technical field studies, report preparation, assisted in developed environmental flows to enhance riparian/meadow vegetation, evaluated potential impacts of new license conditions on riparian resources, and prepared a riparian/meadow monitoring plan.

# Coleen L. Shade, AICP, CEP

## Current Position

Senior Environmental Planner

## Discipline Areas

- > Project Management
- > Interdisciplinary Team Leader
- > NEPA / CEQA / TRPA
- > Environmental Planning
- > Public and Stakeholder Outreach
- > Meeting Facilitation

## Years' Experience

31

## Joined Cardno

2019

## Education

- > MA, Environmental Education, California State University (CSU), Humboldt
- > BS, Natural Resources Planning, CSU Humboldt

## Certifications

- > Certified Environmental Planner, American Institute of Certified Planners (AICP), No. 129093
- > Advanced Certification in Environmental Planning, AICP
- > LEED Accredited Professional

## Affiliations

- > American Planning Association (APA), California and Nevada Chapters

## Summary of Experience

As a senior environmental planner for Cardno, Ms. Coleen Shade engages both her natural resources knowledge and broad experiences from a professional planning career of more than 30 years spent in both the public and private sectors. Ms. Shade's planning practice started with her role as a natural resources planner with the Tahoe Regional Planning Agency (TRPA), and has expanded to include community, recreation, safety, and infrastructure planning that considers and supports local and regional resiliency.

Her work has included leading California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and TRPA environmental document preparation. Ms. Shade has both managed and contributed to the preparation of individual environmental documents and multi-agency joint documents. Bringing diverse agencies with multiple missions together to create comprehensive plans are efforts Ms. Shade enjoys and at which she is well suited to succeed because of her natural resources education and experiences in the unique landscapes of the Sierra Nevada.

Ms. Shade has a keen ability to engage and facilitate multi-interest, multi-agency, multi-stakeholder processes that create outcomes that meet client needs and regulatory requirements and invests the participants in the outcome. She has extensive experience managing public outreach and engagement efforts that include an array of project types, stakeholders and all levels of controversy. From the development of policies to prohibit two-stroke engines on Lake Tahoe to the negotiation of northern goshawk disturbance exclusion areas to the development of a set of Land Tenure Criteria for public/private land transfers, she has successfully planned and facilitated community workshops, managed agency and stakeholder engagement work sessions, and facilitated technical working group meetings.

## Significant Projects

*Project Manager – Southern California Edison (SCE) Integrated Vegetation Management Project NEPA Environmental Assessment – Sierra National Forest, California*

Ms. Shade is managing the preparation of an environmental assessment for SCE integrated vegetation management on the Sierra National Forest. The project's objective is to manage for forest health, reduce wildfire risks through fuel reduction, and address hazard tree threats along the power lines. The project will effectively amend the operation and management plan to increase the "tool box" for vegetation management tools and strategies that can be used within SCE's master use permit, including the use of herbicides. Tasks include resource surveys and mapping, public scoping workshop, and environmental document preparation that leads to a decision memo by the US Forest Service (USFS).

*Project Manager – Nevada County General Plan Safety Element Update – Nevada County, California*

Ms. Shade was responsible for the research, rewrite and update of the Nevada County General Plan Safety Element to meet new state statutes, regulatory requirements, consistency with other programs, and needed informational revisions. Ms. Shade worked closely with Nevada County internal departments (i.e., planning, office of emergency services, public works, environmental health, public health, and building), local fire districts, Nevada County Fire Safe Council, Nevada County Resource Conservation District, California Geological Survey, and California Department of Forestry and Fire

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- > Association of Environmental Professionals
- > Sierra Nevada Alliance Board of Directors
- > Friends of Banner Mountain Firewise Community Steering Committee
- > Lake Tahoe Educational Foundation Board of Directors, Past President
- > Tahoe Chamber Board, Past Member and Chair of the Government Affairs Committee
- > Tahoe Rim Trail Association Board of Directors, Past Member
- > Lake Tahoe Federal Advisory Committee, Past Member

## Training

- > Advanced Facilitation Training, USFS Facilitation Institute
- > Mediating Natural Resource Conflict Resolutions, University of California, Davis
  - > Resolving Public Policy Conflicts, Common Ground and Center for Collaborative Policy

Protection. Significant amendments and additions were made to the document, including the addition of climate change and environmental justice policies.

*Project Manager for Lead Agency, Nevada County – Van Norden Dam Removal Project – Tahoe Donner Land Trust – Soda Springs, California*

Ms. Shade was project manager for the controversial Van Norden Dam spillway modification (dam removal) project. The project goals included alleviating dam failure risks and ability to impound water. Responsibilities included project development, public engagement, and environmental clearance oversight (administrative mitigated negative declaration that led to an EIR). The EIR was certified with a statement of overriding consideration for downstream flooding and approved unanimously by Nevada County.

*Project Manager – Nevada City School of the Arts Comprehensive Master Plan, Use Permit and Mitigate Negative Declaration – Nevada County, California*

Ms. Shade prepared the master plan and environmental clearance document, drafted permit conditions, prepared the staff report, and presented the final project.

*Project Manager – Timber Production Zone (TPZ) Rezone – Nevada County, California*

Ms. Shade prepared the mitigated negative declaration to “roll-out” TPZ-zoned parcels and rezone to general agriculture. She prepared and presented staff report.

*Project Manager – TRPA Shorezone Policy for Lake Tahoe Environmental Impact Statement (EIS)/EIR/EIS – Lake Tahoe, California/Nevada*

Ms. Shade led all efforts for development of new and amended policies for uses and structures on and adjacent to Lake Tahoe. She managed existing condition surveys (physical, biological, structural), technical expert working groups, stakeholder and general public engagement, and the preparation of the joint TRPA EIS/CEQA EIR/NEPA EIS.

*Project Manager – Tahoe Keys Marina and the North Tahoe Marina, Tahoe Regional Planning Agency – City of South Lake Tahoe and Tahoe City, California*

Ms. Shade managed existing condition surveys (physical, biological, and structural), agency/stakeholder steering committee meetings, marina master plan development, the preparation of the joint EIS/EIR/EIS and public engagement.

*Project Manager – Tahoe Keys Property Owners Association (POA) West Channel Dredging Project – Lake Tahoe, California*

Ms. Shade was responsible for directing project design to meet regulatory requirements, oversight for ongoing water and materials monitoring, and the environmental clearance/permitting through seven local, state and federal agencies. She provided facilitation, prepared outreach information, and wrote monthly articles for the POA newsletter. The project from initiation through implementation took less than 12 months.

*Project Manager – Harrison Avenue Streetscape and Water Quality Improvement Project – South Lake Tahoe, California*

Ms. Shade provided project management for a “complete streets” project for a commercial district in South Lake Tahoe. She led an interdisciplinary team in the development of design solutions with a working group of agencies and property owners. She successfully collaborated with both the City of South Lake Tahoe and the property owners to create an assessment district and move the Harrison Avenue public/private partnership to implementation. She was responsible for all environmental clearance (e.g., CEQA, TRPA, and Federal Highway Administration/Caltrans NEPA), utilities agreements, easement agreements, and all permitting.

# Jennifer Chase

## Current Position

Senior Project Scientist

## Discipline Areas

- > Environmental Permitting and Compliance
- > Terrestrial Wildlife and Botanical Assessment and Analysis
- > Wetlands Delineation
- > Agency Consultation
- > Project Management

## Years' Experience

14

## Joined Cardno

2017

## Education

- > Master of Environmental Management, Forest Ecology and Management, Duke University, 2003
- > BA, Environmental Science/Physical Geography, University of Colorado, 1999

## Trainings

- > EIR/EIS Preparation and Review, University of California – Davis Continuing and Professional Education, 2021
- > Intermediate CEQA Workshop, Association of Environmental Professionals, 2021
- > After the Flames, Plan for Post-Fire Flooding Webinar,

## Summary of Experience

Ms. Jennifer Chase is an environmental professional with more than 14 years of experience in natural resource management and scientific research. At Cardno, Ms. Chase currently serves as a senior project scientist and project manager working on a variety of environmental projects requiring permitting and approval by multiple state and federal agencies, including the US Army Corps of Engineers (USACE), US Department of Agriculture – Forest Service (USDA-FS), State of California Regional Water Quality Control Board (SWB), and California Department of Fish and Wildlife (CDFW). She supports the preparation of documents such as environmental assessments and decision memoranda prepared in compliance with the National Environmental Policy Act (NEPA) as well as biological resource assessments and complex wetlands permitting packages. For her work on Southern California Edison's (SCE's) Hydro Generation Program, Ms. Chase manages project teams and supports the client by providing design solutions and recommendations that keep projects moving forward while minimizing potential impacts to natural resources.

Ms. Chase's technical biological experience includes 7 years of experience leading field crews in Yosemite, Sequoia, and Kings Canyon National Parks; the Inyo National Forest; and the Mojave National Wildlife Reserve and assisting in the planning and design, implementation, and data analysis for a multi-year vegetation and wildlife projects.

## Significant Projects

*Senior Project Scientist – SCE On-Call Environmental Services Contract, Hydro Generation Program, SCE – California*

Since 2017, Ms. Chase has been involved with SCE's Hydro Generation program providing technical and project management support for non-routine maintenance activities for hydroelectric facilities including permitting, environmental compliance, and construction support. A majority of the project work is located in the Sierra Nevada, both the eastern and western slopes. Ms. Chase has successfully supported over 50 projects requiring regulatory agency approval and/or wetlands permitting application packages from either or both federal and state agencies (e.g., USDA-FS, USACE, US Fish and Wildlife Service, SWB, and CDFW). Ms. Chase provides support for each project from the early stages of project design through project implementation, regularly coordinating and/or preparing the required biological resource-related deliverables (e.g., biological resource technical reports, biological assessments and evaluations, and fish rescue and relocation plans), coordinating or preparing water resource-related deliverables (e.g., wetlands jurisdictional delineation reports, wetlands permitting packages, and water quality monitoring plans), coordinating with the cultural resources team for the preparation of cultural resource deliverables (e.g., cultural resource memoranda and reports, letters of concurrence with State Historic Preservation Offices), and coordinating project construction support.

*Senior Project Scientist – Sallie Keyes Wet Meadow Delineation, John Muir Trail (JMT) Wilderness Conservancy – John Muir Wilderness Area, California*

Ms. Chase provided project coordination and senior technical review for a backcountry field effort and subsequent preparation of a wetland delineation report prepared for the JMT Wilderness Conservancy. The wetlands delineation technical report was submitted



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- Coalitions and Collaborative, Inc. 2021
- > Cal-Adapt and Adaptation Planning Guide Workshop, 2020
- > 40-hour US Army Corps of Engineers Wetland Delineation Training, 2019
- > Nationwide Permits, 2019
- > California State Water Board Lahontan Region 6, Nondomestic Wastewater Workshop, 2019
- > Advanced CEQA and NEPA Basics Workshop, 2013
- > GIS Spatial Analyst Short Course, 2009
- > Learn the R System for Statistical Analysis and Graphics, 2009

to USDA-FS Sierra National Forest and will be used to guide future decision-making efforts for a trail reroute outside of an environmentally sensitive wet meadow.

### *Ecologist – USGS Volcanoes and Disruption Ecology Study – Inyo National Forest, California*

Ms. Chase worked as an ecologist on a joint USGS and USDA-FS project with the objectives of quantifying and describing patterns of forest succession in a carbon dioxide tree kill zone near Mammoth Pass. For this study, Ms. Chase investigated the relationship between growth rates of young conifers and level of carbon dioxide emission. She played a lead role in selecting the plots, collecting field data, conducting greenhouse studies using the soil samples collected, and installing and monitoring animal exclosures. She also assisted in the preparation of maps and text for annual technical reports. This work was completed prior to joining Cardno.

### *Ecologist – USGS Alpine Mammal Study – Sierra Nevada, California*

Ms. Chase served as an ecologist on this multi-agency collaborative study with the objective of understanding whether mammals have the ability to mediate climatically induced vegetation transitions in alpine ecosystems. Her key responsibilities included leading small mammal (e.g., yellow-bellied marmot, pika, Belding's ground squirrel, and golden mantled ground squirrel) and alpine meadow vegetation surveys, creating and maintaining the project database, analyzing data, and preparing annual technical reports with the study results. Ms. Chase presented results from a spatial analysis of the herbivory data at a professional conference. Completed prior to joining Cardno.

### *Senior Project Scientist – Big Creek Hydroelectric System Post-Creek Fire Emergency Support, SCE – Big Creek, California*

Ms. Chase has been providing emergency support for SCE since the Creek Fire in 2020 that burned over 379,895 acres in California and affected SCE's Big Creek Hydroelectric System. Project support has included preparation of over six emergency permitting packages for submission to the relevant regulatory agencies (i.e., USACE, SWB, and CDFW), with a fast turnaround time to support immediate facility repairs and avoid future debris issues via the installation of debris barriers and debris fencing. Ms. Chase has also supported the preparation of a decision memorandum for categorical exclusion on behalf of USDA-FS for hazard tree removal that includes 22 treatment areas and 253 acres on USDA-FS-administered lands adjacent to SCE facilities and access roads, which included the development of appropriate project-specific resource design criteria.

### *Ecologist – Bighorn Summer Range Study – Sierra Nevada, California*

Ms. Chase served as an ecologist on this multi-year US Geological Survey (USGS) project with the objective of predicting the effect of climatic shifts on the summer range of the Sierra Nevada bighorn sheep. Her responsibilities included managing field crews, designing and maintaining the project's multi-relational database, and analyzing data. She used multivariate statistical analyses, including variance partitioning, distance-decay relationships, and structural equation modeling to better understand herbaceous community composition and species diversity. Completed prior to joining Cardno.

### *Project Biologist – SCE Environmental Compliance – Eastern Sierra, California*

Ms. Chase conducted over 25 preconstruction field surveys for special-status plant and wildlife species and nesting bird surveys and over 10 wetland field checks and delineations as part of SCE's Transmission and Distribution Program throughout the Eastern Sierra. Ms. Chase is experienced in conducting presence/absence surveys and evaluating habitat suitability for a variety of Sierra Nevada region special-status flora and fauna.

# Sarah Hoff-Phillips

## Current Position

Senior Staff Scientist

## Discipline Areas

- > Project Management
- > Forest Inventory and Sampling
- > Botanical Surveys
- > Wetland Delineation
- > Environmental Permitting and Compliance

## Years' Experience

10

## Joined Cardno

2018

## Education

- > BS, Environmental Science, University of Washington, Seattle, 2006

## Professional Registrations

- > USACE 40 Hour Wetland Delineation Course, Wetland Training Institute, 2020
- > International Society of Arboriculture (ISA) Certified Arborist, *pending*
- > California Native Plant Society, Bristlecone Chapter, 2021
- > CPR/Wilderness First Aid, 2020
- > Pacific Southwest Certified Timber Cruiser, 2015
- > Operational Leadership, NPS, 2014

## Summary of Experience

Ms. Hoff-Phillips has broad fieldwork experience within a variety of monitoring and field projects in California. Her work includes performing terrestrial biological surveys; construction monitoring and environmental compliance; and geographic information systems (GIS) mapping. Her extensive fieldwork experience also includes conducting protocol-level surveys for sensitive and listed plant species; invasive species; peat-accumulating meadow delineation; meadow classification; tree disease identification and monitoring; small mammal surveys; air and water monitoring; and a variety of vegetation monitoring. She has also worked as an inspector to monitor timber sales and service contracts for contract and for NEPA compliance. Ms. Hoff-Phillips has experience with federal regulatory compliance and permitting including Clean Water Act (CWA) permitting under Sections 404 and 401 and California Department of Fish and Wildlife (CDFW) Section 1602 Lake or Streambed Alteration permitting. She has experience working in the Eastern Sierra Nevada including Yosemite, Sequoia, and Kings Canyon National Parks and the Inyo National Forest.

## Significant Projects

*Project Manager – Cuddeback and Tenneco High Fire Area (HFA) - Southern California Edison (SCE) Environmental Compliance On-call Program – California*

Ms. Hoff-Phillips was the Environmental Lead for Cuddeback 2018, 2020 and Tenneco HFAs. Support of Tenneco HFA included support of 1500+ poles replacements and 94 circuit miles of covered conductor on private and public lands. She trained crews on environmental compliance and provides support for planned as well as emergent work. She coordinated environmental compliance with construction crews through verification of work scope, conducting additional environmental review for new scope, and coordination of field surveys. Additionally, she directed compliance with the United States Forest Service (USFS) Master Special Use Permit (MSUP) program for work on Los Padres National Forest. In addition to achieving environmental compliance, she has highlighted biologist support safety and fostered professional relationships which earned her accolades from the client and Cardno GEM (Going the Extra Mile) Award.

*Interim Deputy Program Manager – SCE Environmental Compliance Wetlands/Waters Program – California*

Ms. Hoff-Phillips served as an interim deputy program manager for the SCE Environmental Compliance Wetlands/Waters Program. She assisted in coordinating work within Cardno to support desktop reviews, jurisdictional delineations, permitting efforts, as well as quality assurance/quality control (QA/QC) of waters monitoring reports. She created internal guidance to support these tasks, trained team members and new deputy program managers.

*Forestry Technician, Timber Management – United States Forest Service – Inyo National Forest Mammoth Lakes, CA*

For various projects units, Ms. Hoff-Phillips designated trees for timber harvesting in accordance with NEPA documentation for nesting birds, stand composition and structure, and tree age. She monitored sales as a Harvest Inspector to verify compliance with the contract and NEPA documentation for timber harvests and service contracts. As part of a team, she conducted a timber cruise in for the Stanislaus National Forest to facilitate a federal land exchange. Additionally, she conducted field work, sale boundary layout, and

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monitored contract compliance in support of the endangered Mono Basin Sage Grouse land restoration.

*Vegetation Specialist – SCE VM-3 Expanded Clearance Vegetation Management Project, Inyo and Mono Counties, CA*

Ms. Hoff-Phillips is a vegetation specialist for SCE's Vegetation Management Expanded Clearance Program for wildfire protection at SCE's legacy generation facilities. She is the lead vegetation specialist for the SCE facilities in Inyo and Mono Counties area of operation. Vegetation Specialists inspect facilities and make vegetation clearance recommendations including removal or treatment of hazard trees. All recommendations are documented with Collector and maintained on an Arc GIS online platform. As a Vegetation Specialist, Ms. Hoff-Phillips also assisted with environmental clearance and agency approval, vegetation clearance monitoring, final inspections and integration into long-term operation and maintenance programs.

*Wetland Assessment Lead – John Muir Trail Conservancy Sallie Keys Wet Meadow Project – Fresno County, California*

Ms. Hoff-Phillips completed a wetland delineation of a sub-alpine meadow in support of the Sallie Keys Wet Meadow project on Sierra National Forest. She delineated the extent of the wetland along with aquatic resources. She was a lead author for the wetland delineation report submitted to the Sierra National Forest.

*Biologist – SCE Environmental Compliance – Eastern Sierra, California*

Ms. Hoff-Phillips conducted over 15 preconstruction field surveys for special-status plant and wildlife species and nesting bird surveys and over 5 wetland delineations as part of SCE's Transmission and Distribution and Generation Programs throughout the Eastern Sierra. Additionally, she conducts biological pre-construction surveys and monitoring for sensitive plant and wildlife species in compliance with California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Boards (RWQCB), and United States Army Corps of Engineers (USACE) permits.

*Wetlands Consultant – Southern California Edison (SCE) Environmental Compliance On-call Program – California*

Ms. Hoff-Phillips completes desktop wetlands reviews of transmission and distribution of SCE operations and maintenance projects in a variety of habitat throughout the SCE territory. She provides recommendations for clearance and mitigation measures for public and private lands. She oversees and reviews jurisdictional delineation (JD) data, prepares JD memorandum reports and figures per agency standards, then provides permitting recommendations. She prepares permit packages per the Clean Water Act (CWA) Section 401 and 404, as well as Section 1600 of the California Fish and Game Code and coordination with the State Water Resources Control Board (SWRCB) and/or Regional Water Quality Control Board, California Department of Fish and Wildlife (CDFW), and United States Army Corps of Engineers (USACE). Ms. Hoff-Phillips conducts waters monitoring in support of SCE operation and maintenance distribution projects including permitted and non-permitted projects throughout the Eastern Sierra. She ensured compliance project permits and provided recommendations for impact minimization and avoidance.

# Crystal West

## Current Position

Senior Consultant

## Discipline Areas

- > Project Management
- > Hydro Generation / FERC License Compliance
- > Environmental Permitting
- > National Historic Preservation Act
- > Agency Consultation
- > Native American Consultation
- > Federal Lands

## Years' Experience

16

## Education

- > BA, Anthropology/ Archaeology, University California Santa Cruz 2002
- > MA in progress, University of Montana, Missoula

## Professional Registrations

- > Society of California Archaeology

## Training

UC Davis Extension Courses:

- > Water Policy in CA 2013
- > NEPA Refresher 2013
- > Clean Water Act and Other Specialized Permits 2013
- > GIS for Resource Management 2013
- > Endangered Species Regulation and Protection 2014

## Summary of Experience

Ms. Crystal West has over 16 years of experience in cultural resource management, interdisciplinary studies and regulatory compliance with specialization in Section 106 of the National Historic Preservation Act (NHPA) as it relates to federal projects, permits and licenses. She manages large hydropower utility contracts and projects throughout California and has helped build and lead Cardno's California Cultural Resource Program. She is currently working on a personal research project with the North Fork Mono Tribe mapping and documenting indigenous trail systems in the San Joaquin River watershed.

Ms. West is adept at collaborating and negotiating with a variety of stakeholders including state and federal agencies, Native American tribes and non-governmental groups and has been successful in facilitating stakeholder meetings that result in agreements to complex issues. In addition to being a subject matter expert in the Sierra Nevada region, she is an excellent communicator who can accomplish complex projects on schedule and within budget.

## Significant Projects

*Cultural Task Lead and Project Manager Yosemite/Sequoia Resource Conservation & Development Council Sugar Pine & Cedar Valley Public Lands Stewardship Project*

Ms. West manages archaeological monitoring at sensitive prehistoric archaeological sites during fuel reduction work. She directs field staff, provides quality control and communicates with the client and the Sierra National Forest (SNF) District Archaeologist.

*Cultural Task Lead for Southern California Edison (SCE) Rush Creek Relicensing Project*

Ms. West is currently serving as task lead for an active SCE hydroelectric relicensing project in the Eastern Sierra on the Inyo National Forest (INF). She manages study plan development for submittal of the Pre-Application Document to Federal Energy Regulatory Commission (FERC) that includes built environment, archaeological and tribal resources. She is serving as the technical lead for tribal resources.

*Cultural Task Lead for Pacific Gas and Electric Company (PG&E) Kerckhoff Hydroelectric Relicensing Project*

Ms. West served as cultural task lead for a PG&E hydroelectric relicensing project on the San Joaquin River in Central California. She managed study plan implementation for archaeological, built environment and tribal resources studies which included:

- > Stakeholder meetings throughout relicensing studies,
- > Development of study plans,
- > Inventory and documentation of resources,
- > Development of a testing and evaluation plan,
- > Eligibility determinations and
- > Historic Properties Management Plan for operation of the project.

She worked directly with PG&E cultural resource specialists, SNF, Bureau of Land Management, Native American tribes and the California Office of Historic Preservation (CAOHP). Eight distinct Native American groups actively participated in this project. Complex cultural resources including two Traditional Cultural Landscapes were found eligible for listing in the National Register of Historic Places (NRHP). Ms. West arranged sub-contracts with three Native American tribes to participate as crew members during

archaeological survey and testing efforts, which improved information sharing between tribes and archeologists. Ms. West is the primary author of the Historic Properties Management Plan (HPMP), which has successfully been filed with FERC.

*Project Manager and Senior Archaeologist for SCE On-Call Environmental Services Hydroelectric Generation*

Ms. West manages and fosters client and agency relations, federal and state permitting, develops and implements resource protection measures for SCE's generation assets maintenance program throughout SCE's service territory. She works directly with SCE's Senior Archaeologist and assists in preparing documents that comply with the USDA Forest Service Region 5 Programmatic Agreement for compliance with the NHPA. She tracks budgets, invoicing and directs staff and sub-contractors on numerous projects under this contract.

*SCE Compliance Manager and Senior Archaeologist , Generation 2011- 2016*

At her position at SCE, Ms. West served as the environmental compliance project manager for FERC licensed hydroelectric projects located in the Eastern Sierra, California. She also served as their senior archaeologist for hydroelectric projects throughout California within numerous Region 5 Forests. She managed nine NRHP eligible historic hydroelectric districts and numerous historic properties under each projects' HPMP.

*Kern River 3 Hydroelectric Project National Register Historic District Expansion*

Ms. West oversaw the recordation and evaluation of 30 historic-era archaeological resources associated with the construction of the Kern River 3 Hydroelectric Project identified during road surveys. She consulted with Sequoia National Forest and Native American tribes. She received concurrence from the CAOHP to expand the Historic District and developed protection and treatment measures to be included in the HPMP for road maintenance activities.

*The Historical Life of the Agnew Tramway Documentary Film, Agnew Tram Reconstruction Project*

Ms. West directed the production of a documentary film for CAOHP and INF as mitigation for SCE's proposed Agnew Tram Reconstruction Project. In 2013, she and her team were awarded the California Preservation Foundation Award for Innovative Cultural Resource Studies and a New York Telly Award for Historical Documentaries.

To view the film follow this link:

<https://www.archaeologychannel.org/video-guide/video-guide/video-guide-list/2510-agnew-tramway>

*Inyo National Forest District Archaeologist 2007 - 2011*

Ms. West managed cultural resources in compliance with NHPA and NEPA as well as interpreted and applied various national and regional Programmatic Agreements (PAs) and Memorandum of Understandings (MOUs) regarding treatment of cultural resources on National Forest Service lands including archaeological site conditioning monitoring and site evaluations. She also oversaw archeological permits, evaluations and surveys of roads, grazing allotments, prescribed fires, and recreation. She supervised and trained a seasonal field archeological crew and volunteers.

# Corinne Munger

## Current Position

Senior Environmental Scientist

## Discipline Areas

- > Biology
- > Mitigation/Conservation Strategy
- > NEPA/CEQA
- > Project Management

## Years' Experience

18

## Joined Cardno

2022

## Education

- > MS, Biology, University of Alaska – Fairbanks, 2007
- > BA, Environmental Studies, University of California – Santa Cruz, 2002

## Professional Registrations

- > CDFW Scientific Collecting Permit #11754 for Birds, Mammals, Reptiles, and Amphibians

## Affiliations

- > Tuolumne County Master Gardener Volunteer Program, 2009
- > California Native Plant Society Member
- > Yuba Watershed Institute Volunteer Board Member, Vice President, 2012–2021

## Summary of Experience

Ms. Corinne Munger is a biologist and environmental planner with over 12 years of experience in environmental consulting and over 18 years of technical experience focused on ecological fieldwork and natural resource management. She has worked on multiple complex projects with diverse stakeholders; completed local, regional, state, and federal permitting and mitigation processes; and managed cross-agency collaboration.

Ms. Munger has experience managing projects, developing documents, and collaborating with agencies and clients to complete environmental review, compliance, and mitigation for public infrastructure and transportation projects throughout northern and central California. She has extensive experience with National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) document preparation, project impact analysis for biological and other resources, development of mitigation/conservation strategies, regulatory permitting and compliance, and mitigation monitoring/reporting.

## Significant Projects Completed Prior to Joining Cardno

*Biologist/Environmental Planner – 'Inimim Forest Restoration Project– Nevada County, California (Yuba Watershed Institute [YWI])*

Ms. Munger led project planning and developed a biological resources report, NEPA Environmental Assessment (EA), and CEQA Initial Study (IS) for forest restoration and fuel reduction treatments in the 'Inimim Forest, approximately 1,700 acres of Bureau of Land Management (BLM) land in northern Nevada County. She guided these documents through the approval process and coordinated environmental compliance during multiple years of project implementation, including development of a Worker Environmental Awareness Training Program, which has been translated into Spanish for contractor crews. The BLM and project funders, Sierra Nevada Conservancy (SNC), were very happy with the success of the 'Inimim Forest project, and additional funding was granted to Ms. Munger's team for project planning for forest treatments on other BLM properties in Nevada County.

*Biologist/Environmental Planner – Round Mountain Landscape Resilience Project– Nevada County, California (YWI)*

Building on the success of previous collaboration with the BLM on the 'Inimim Forest Project, the YWI identified the Round Mountain project as a priority area for another BLM collaboration in Nevada County. Project planning is underway for vegetation treatments near the South Yuba River on 1,070 acres BLM land and 160 acres of contiguous private lands held under conservation easement by the Bear Yuba Land Trust (BYLT), with the goals of increasing forest resilience to stressors such as drought, wildfire, climate change, and bark beetles and reducing the risk of high-severity fire and associated impacts to human safety and property.

Proposed treatments include a combination of understory fuels reduction, stand thinning, and prescribed fire treatments, plus herbicides and prescribed herbivory. Ms. Munger is managing the planning effort in coordination with the YWI Executive Director and an interdisciplinary team of BLM staff, including a BLM forester, fuels technician, fire management specialist, biologist, botanist, and archaeologist. The project description is being developed to cover all potential management prescriptions/ treatments, using a condition-based approach that defines the parameters for determining future appropriate

# Attachment B



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site-specific treatments. This approach will use GIS data (including LIDAR) and the results of resource surveys to identify priority treatment areas, manual-only (i.e. no mechanical) treatment areas, environmentally sensitive areas, and other constraints and management considerations.

Ms. Munger has identified a number of solutions to address future implementation challenges. The Project is located within U.S. Fish and Wildlife Service (USFWS) critical habitat for California red-legged frog. Additionally, multiple California spotted owl nests were mapped in the Project area during 2021 protocol-level surveys. Winter rainy season Limited Operation Periods (LOPs) for California red-legged frog, along with spring/summer avian nesting season LOPs for California spotted owl, in conjunction with BLM's seasonal restrictions to reduce the risk of wildfire that limit equipment use May through November, create unfeasible timing restrictions for implementation in large portions of the Project area. Ms. Munger worked with BLM and USFWS biologists to develop strategies for resource protection measures, including seasonal aquatic resource buffers for California red-legged frog, that were agreed upon to protect resources while also facilitating future implementation and minimizing LOPs. Ms. Munger wrote a draft Biological Assessment for California red-legged frog based on the outcome of this agency coordination.

Ms. Munger is developing an EA on behalf of the BLM for NEPA compliance. Although the Project's proposed treatments on federal land are currently exempt from CEQA, Ms. Munger is completing CEQA-level review and analysis for the entire Project area to help the Project remain shovel-ready despite any potential future California regulatory changes. This is being completed with very little additional effort, by including California-protected species and resources in the biological analysis and by including a completed CEQA IS checklist as part of the SNC grant deliverable, with most resource topics referring to the applicable section of the EA rather than repeating any evaluation. Commercial timber harvest activities are proposed within the private portion of the Project; a register professional forester is being hired to complete the Timber Harvest Plan for this portion.

*Biologist/Environmental Planner – Little Deer Creek Landscape Resilience Project– Nevada County, California (YWI)*

Ms. Munger is completing the environmental review for this SNC-funded Project in Nevada County that proposes forest treatments on 200 acres of BLM land and 60 acres of adjacent private land held under conservation easement or fee title by the BYLT. The YWI is partnering with a local non-profit, Sierra Streams Institute, who will be responsible for developing site-specific treatment prescriptions and conducting stakeholder outreach. The YWI hired subcontractors to complete botanical surveys, California spotted owl and northern goshawk surveys, and cultural resource surveys. Using the results of the project-specific analysis, the YWI is developing a biological resources report and a Determination of NEPA Adequacy (DNA) to obtain NEPA coverage for the Project under the BLM's 2019 Hazard Removal and Vegetation Management Project's Final Programmatic EA (pEA), which covers hazard removal and vegetation management within 200 feet of infrastructure on forests and woodlands management by the BLM in much of California. The DNA will use a condition-based approach to determine applicable pEA Project Design Features, which are a list of pre-defined measures to reduce or eliminate potential project effects.

Meghan is a biologist with eight years of experience in biological resources, natural resource management, environmental education, and scientific research. Meghan's experience has led biological teams on high profile projects, conducted multiple biological surveys, completed complicated data analysis, prepared state and federal environmental permit applications, and has written multiple CEQA documents and biological assessments/evaluations for various projects. Additionally, she conducts environmental compliance monitoring and has conducted a variety of studies and surveys in many regions throughout Nevada, Idaho, Utah, and primarily California. In her years previous to those at Stantec, Meghan managed nature preserves, riparian and wetland areas, and oak woodlands throughout 14 California State Parks in the central valley and southern Cascade Range.

## EDUCATION

- ♦ BS, Environmental Science and Management (Concentration in Ecology, Biodiversity, and Conservation Biology), University of California, Davis, Davis, California, 2013
- ♦ Natural Resource Management, University of Copenhagen, Copenhagen, Denmark, 2011

## CERTIFICATIONS & TRAINING

- ♦ U.S. Army Corps of Engineering Wetland Delineation Certification Program, Wetland Training Institute, Roseville, California, 2018
- ♦ Engineers Regulatory Program Workshops, U.S. Army Corps, Sacramento, California, 2016-2019

## PROJECT EXPERIENCE

### Environmental Assessments and CEQA

#### **South Yuba River Citizens League and United States Forest Service, Van Norden Meadow Restoration and Recreation Project, Nevada County, California (Project Manager and CEQA Specialist), 2021-present**

Meghan is the project manager and CEQA specialist on this restoration and recreation project located in Van Norden meadow, an important Sierra meadow at the headwaters of the South Yuba River. Meghan led a team of CEQA practitioners to prepare an IS/MND that required careful crafting of mitigation measures and impact assessments due to sensitive cultural and biological resources within the meadow. Additionally, Meghan led a team to complete a Biological Assessment for Federally Listed Species, as well as a Migratory Bird Assessment and a Project Management Indicator Species Report in support of federal permitting.

#### **El Dorado Irrigation District, Upper Main Ditch Piping Project, Pollock Pines, California (Task Manager and CEQA Specialist), 2016-present**

Meghan has been working with the El Dorado Irrigation District to provide environmental consulting services for the Upper Main Ditch Project. As the Project has evolved, facing constraining public and political factors, Meghan has advised the District on appropriate CEQA, NEPA, and state and federal Permitting approaches and documentation. Meghan assisted in managing and authoring a large portion of the Draft Environmental Impact Report in 2016, including complex technical evaluations surrounding visual resources, hydrology, and biological resources. Meghan then helped to work with the District to develop an approach and additional scope to perform equal level of analysis for all alternatives, an approach that provided the District with flexibility in their project selection.

#### **Placer County Memorial Overland Emigrant Trail Donner Summit Crossing, Placer County, California (Lead Wetlands Specialist and Botanist), 2015-present**

Meghan is the lead wetlands specialist and botanist for the multi-use proposed Memorial Overland Emigrant Trail that will connect Kingvale on the western side of the Sierra crest to Donner Memorial State Park on the eastern side. Meghan conducted aquatic resource delineations and rare plant surveys for approximately 21 miles of the trail. Meghan also completed an environmental constraints analysis evaluating archaeology, biology, and transportation impacts. Meghan has provided biological insights and strategic advice for route selection and agency coordination with various landowners to meet stakeholder interests and minimize potential impacts.



**Donner Summit Association, Donner Summit Public Use, Trails, and Recreation Facilities Plan, Donner Summit, California (Assistant Task Manager), 2020-2021**

Meghan was the assistant task manager for the development of the Donner Summit Public Use, Trails, and Recreation Facilities Plan. She coordinated with the Donner Summit Association and other stakeholders to see the Plan through development. The purpose of the Plan was to develop a comprehensive plan to guide recreation improvements on Donner Summit and provide a framework for near-term and long-term decision-making.

**Santa Clara Valley Water Agency, Pacheco Reservoir Expansion Project, Santa Clara County, California (CEQA Specialist and Botanist), 2020-2021**

Meghan was the author on multiple sections of the Draft Environmental Impact Report for the Pacheco Reservoir Expansion Project and assisted in the analysis of alternative projects. Meghan also conducted protocol-level special-status plant and non-native invasive plant surveys within the project area of the proposed Pacheco Reservoir expansion area. This was completed by using random meandering techniques to ensure thorough coverage of rare plants. Following surveys, she assisted in post-processing all botanical data. Meghan also completed habitat assessments for special status wildlife species, as well as nesting bird surveys. She also completed wetland delineations within the project area.

**Multiple Clients, Nevada Conservation Credit System for Sage Grouse Habitat, Botanical Assessment, Various Counties, Nevada (Lead Botanist and Field Coordinator), 2017-2021**

Meghan has been the field coordinator and lead botanist for numerous projects under the Nevada Conservation Credit System (CCS) for the past four years. She conducted vegetation and botanical assessments at various sites and projects throughout Northern Nevada. Meghan is a certified CCS Verifier per the State of Nevada. The state-run program has a protocol methodology to measure sagebrush cover and herbaceous composition with a modified line-point intercept method and a Daubenmire frame technique. This habitat assessment includes collecting botanical data for each transect that can be qualitatively analyzed for a score in regards to potential sage grouse habitat. Meghan also completed the data quality control and initial analysis for some of these projects.

**Nevada Irrigation District Lower Cascade Canal Long-Term Canopy Cover and Tree Health Monitoring Assessment, Nevada County, California (Project Manager and Arborist), 2015-present**

Meghan is the project manager of this ongoing monitoring project for the Lower Cascade Canal Long-Term Monitoring program which analyzes five different study locations and one control site to monitor the effects of a reduced flow canal on adjacent riparian vegetation. Meghan, along with a team of biologist, conducts and assessment and analysis for this program every two years. The various assessments include a tree health assessment, a canopy cover assessment (via densitometer analysis), and a pond study. The three components of this long-term assessment evaluate the effects of the reduced flows over a ten-year period.

**Zayo Group, Fiber Optic Project, Various Counties in Oregon, California, and Nevada (Lead Wetlands Specialist and Botanist), 2019-2021**

Meghan was the field lead on this large fiber optic linear alignment with two alignments running from Reedsport, Oregon to Eugene, Oregon and Prineville, Oregon through California ending in Reno, Nevada. Meghan, along with a large team of scientists, delineated all potential WOTUS and WOTS within varied USACE Districts, ecosystems and regions of the three states. USACE level delineations were used for field surveys. Meghan also conducted protocol-level botanical surveys per agency protocols and regulatory stipulations. Meghan completed the reporting of these tasks and took these projects from start to finish.

**Truckee River Watershed Council, Sardine Meadow Restoration Project, Sierra County, California (Biologist), 2017**

Meghan was the project biologist on this restoration project in the high Sierra. Meghan assisted in leading and authoring the CEQA document (IS/MND) for this restoration project. Meghan also performed a protocol-level botanical survey for *Plumas ivesia* and other special-status plant species. Due to the presence of special-status species, Meghan developed measures to avoid potential impacts to these special-status species during the construction portion of the restoration.

**Sierra Streams Institute, Little Deer Creek Restoration Project, Nevada City, California (Biologist), 2016-2017**

Meghan authored a majority of the CEQA document (IS/MND) for this restoration project. In addition, she also provided technical biological and environmental support services for permitting and regulatory compliance.

# Claire Archer, PhD

## Current Position

Hydrogeologist

## Discipline Areas

- > Hydrogeology
- > Hydrology
- > Groundwater
- > Groundwater modeling
- > Surface water modeling
- > Geochemical modeling
- > Sedimentology

## Years' Experience

8

## Joined Cardno

2018

## Education

- > PhD, Hydrogeology, UNR, 2017
- > Master of Science, Geoscience; University of California, San Diego 2013
- > BA, Earth Science; Boston University, 2009

## Summary of Experience

Dr. Claire Archer is a hydrogeologist with a background in groundwater hydrology, sedimentology, geochemistry, and groundwater-surface water interactions. Her expertise in hydrology and hydrogeology spans multiple sub-disciplines and techniques, including water quality, soil science, flood control, limnology, seismology, stormwater management and floodplain restoration. Dr. Archer has expertise in groundwater modeling, surface water and stormwater modeling, and chemical analysis of waters and sediment in a range of settings. Her experience with groundwater-surface water interaction studies includes developing models using MODFLOW, PHREEQ-C, HEC-RAS, and XP-SWMM software as well as conducting chemical and isotopic tracer studies of lakes, rivers, and groundwater. Dr. Archer has been the lead author and has co-authored several publications related to groundwater characterization, groundwater-surface water interactions, and hydrology. She has given oral presentations on the results of this research at multiple international conferences.

Dr. Archer is proficient in Geographic Information Systems (GIS) software (ArcMap, ArcCatalog); the United States Geological Survey (USGS) MODFLOW One-Water Hydrologic Flow Model (OWHM), MODFLOW-LGR, coupled Groundwater Surface-water Flow Model (GSFLOW), Precipitation-Runoff Modeling System (PRMS), PHREEQC geochemical modeling software, the USGS National Streamflow Statistics Program (NSS), ArcSWAT (Soil & Water Assessment Tool), the River Analysis System (HEC-RAS) 2D, EPA SWMM Stormwater Management Software, and Arc Hydro.

## Significant Projects

### *Expert Hydrogeologist – Confidential Client – Southern California*

Dr. Archer provided expert hydrogeologic and hydrologic analyses and testimony related to groundwater – surface water interaction in a southern California watershed. The analyses involved streamflow gage data and monitoring well data, groundwater flow model results, and the analysis of previously conducted studies on groundwater and surface water within the watershed. 2019 – Present.

### *Expert Hydrologist – Confidential Client – Baton Rouge, LA*

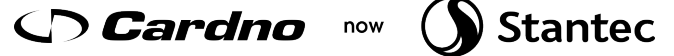
Dr. Archer is provided expert testimony related to a proposed development in Baton Rouge, Louisiana. The proposed development will occur within an area with a history of flooding adjacent to a swampland nature preserve. Dr. Archer assessed stormwater management plans, drainage plans and analyzed the hydrology to determine if the proposed development will negatively impact neighboring properties and/or exacerbate flooding issues. 2021 – Present.

### *Piru Creek Hydraulic Modeling – Ventura County, CA*

Dr. Archer constructed a 2D HEC-RAS hydraulic model for the proposed design of a new release channel on Piru Creek below the Santa Felicia dam in southern California. The modeling consisted of simulating several flows and analyzing model outputs of depth-velocity, and shear stress to determine the optimal design for aquatic species habitat and channel morphology. 2021.

### *Syar Terrace Pit Reclamation Hydraulic Modeling – Russian River, CA*

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For this project, Dr. Archer conducted hydraulic modeling using HEC-RAS 2D to inform the reclamation of a series of mining pits adjacent to the Russian River near Healdsburg, CA. Modeling analyses were conducted to determine the depth, velocity, and shear stress at the pits for a range of water year types and design flows. This work included analysis of the results using Excel and GIS and creating visualizations of the results for the technical report. 2021- Present.

*Project Manager –Sierra Sage Golf Course Dam Rehabilitation Study– Washoe County, Nevada*

Dr. Archer led a team working to rehabilitate a dam in Washoe County. The dam outlet structure was inoperable, leading to overtopping during an exceptionally wet winter and erosional damage to the downstream embankment. The project involved conducting a flow conveyance analysis to determine the capacity of the downstream drainage system, designing bank stabilization measures, and selecting a new outlet valve. 2021- Present.

*Regional Groundwater Model – Southern California Coastal Watershed*

This project included the construction of a regional groundwater flow model focusing on groundwater – surface water interaction. The model was built to run predictive scenarios that can be used to assess different water management strategies. Dr. Archer worked with a team to build the groundwater model using PRMS and MODFLOW-OWHM took the lead on model calibration of both the surface and groundwater models as well as boundary condition package implementation. 2018-present.

*Geochemical Modelling – Smithfield Hog Production – Ashland, VA*

This work was performed in response to elevated ammonia levels recorded at monitoring wells adjacent to a hog farm facility with the goal of assessing remediation options. Dr. Archer performed geochemical modelling of the groundwater at the site to determine the speciation of nitrogen under current conditions and potential chemical evolution of the nitrogen phases. She then modelled several treatment options to determine the effectiveness at remediating the elevated ammonia concentrations. 2020.

*Project Manager - Flood Mitigation Strategies – Lemmon Valley – Washoe County, Nevada*

Dr. Archer is leading an analysis of several closed-basin lake flood mitigation strategies related to Swan Lake in Lemmon Valley, NV. This analysis involves modeling runoff contributing to the basin, evaluating potential diversion strategies, modeling roadway alteration schemes and assessing how impermanent flood barriers effect lake levels and potentially flooded areas. 2020- Present.

*Soils Analysis -- Steamboat Creek Restoration, Carson River Mercury Superfund Site – Pleasant Valley, Nevada*

Dr. Archer worked with a team to collect soil samples from several sites in the project area. Soil samples were collected from pits at various depths and the structure and texture were characterized in the field. Samples were analyzed for levels of contaminants of concern, including mercury, arsenic and lead. Results of the geochemical analyses were interpreted within the context of the local geology, regional soil types, and floodplain geomorphology. 2019.

# Susan D. Talcott, PhD

## Current Position

Archaeological Field Director

## Discipline Areas

- > Archaeology
- > California and Great Basin Archaeology
- > Human Osteology

## Years' Experience

12

## Joined Cardno

2020

## Education

- > PhD, Anthropology, University of California Davis, 2019
- > MA, Anthropology, University of California Davis 2012
- > BS, Anthropology, University of California Davis, 2007

## Certifications

- > First Aid/CPR/AED

## Affiliations

- > Register of Professional Archaeologists
- > Society for American Archaeology
- > Society for California Archaeology

## Summary of Experience

Dr. Talcott has 12 years of experience in CRM, research, and regulatory compliance primarily in California and the Great Basin. Her past roles have included Senior Archaeologist and Project Manager for CEQA, NEPA, and Section 106 of the NHPA projects authoring technical reports, conducting records searches, facilitating Native American outreach, leading fieldwork, and evaluating archaeological resources. Dr. Talcott has experience working on fuels reduction, forest rehabilitation, levee repair, residential and commercial development projects. Over her career she has also participated in multiple utility projects, including gas line installation, solar farm, and telecommunications towers. Dr. Talcott is experienced in site testing excavation, data recovery, burial excavation, skeletal assessments, and construction monitoring at sensitive archeological sites. She has used her skill set to help foster positive working relationships with Native American Tribes in northern California, most recently working collaboratively with the United Auburn Indian Community. She is proficient in field recordation, conducting research, laboratory management, cataloging, and analysis of archaeological materials. She has experience participating in large pedestrian surveys in Utah and as a Crew Chief for large pedestrian surveys in California, Nevada, and Missouri.

Dr. Talcott previously conducted systematic review of faunal materials in museum collections to identify and catalog fragmentary human skeletal remains co-mingled with archaeological faunal assemblages; integrating anthropological best practices, museum guidelines, and community stakeholder wishes into the development of unique project methodology. She reviewed and developed NAGPRA inventories for museum collections, ensuring archaeological collections complied with NAGPRA regulations. Additionally Dr. Talcott has eight years of college teaching and mentorship experience.

## Significant Projects

*Archaeological Monitor/Osteologist – Sacramento River East Levee Project, Contract 1 – Sacramento County, California*

Dr. Talcott was responsible for providing cultural resource support for the Native American monitors, construction monitoring, and providing in-field assessments of resources. She worked closely with Native American monitors to facilitate communication of tribal wishes regarding the discovery of cultural resources, to construction personnel and the contractor's archaeologist.

*Senior Archaeologist/Project Manager – Matchbook Winery Solar Array Project – Yolo County, California*

Dr. Talcott was responsible for planning and leading pedestrian survey and auger testing, conducting archival research with the California Historical Resources Information System, Native American outreach, and documenting cultural resources. Dr. Talcott provided resource evaluations and authored the final CEQA letter report.

*Senior Archaeologist/Project Manager – Lodi Lake Restoration Project – San Joaquin County, California*

Dr. Talcott was responsible for planning and leading fieldwork for both survey and site testing, conducting archival research, Native American outreach, and documenting cultural resources. Dr. Talcott provided cultural resource evaluations and authored the

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final CEQA letter report. She helped organize multiple Project site visits with Native American communities.

*Senior Archaeologist/Project Manager – Mokelumne River Debris Removal Project – Sacramento and San Joaquin Counties, California*

Dr. Talcott was responsible for planning and leading fieldwork to assess the Project's impact on cultural resources at 55 debris removal sites along the Mokelumne River. Dr. Talcott conducted archival research with the California Historical Resources Information System, Native American outreach, and provided recommendations based on conditions at each debris removal site.

*Senior Archaeologist/Project Manager – Mills High School Athletic Complex Project – San Mateo County, California*

Dr. Talcott was responsible for planning and leading pedestrian survey and auger testing, conducting archival research with the California Historical Resources Information System, Native American outreach, and documenting cultural resources. Dr. Talcott provided resource evaluations and authored the final CEQA letter report.

*Senior Archaeologist – Cal.net Telecommunications Projects – Tuolumne and Mariposa Counties, California*

Dr. Talcott conducted archaeological record searches and research into the Historical Resources Inventory listings to assess candidate's location for potential for unrecorded and recorded cultural resources, and to review the potential for direct and indirect visual impact by construction. Authored multiple Section 106 compliance letter reports.

*Field Archaeologist/ Laboratory Technician – Tower Market #99 Data Recovery Project – Solano County, California*

Dr. Talcott conducted data recovery, burial excavation and extensive archaeological monitoring. She participated in cataloguing excavated materials, human osteological analysis for hundreds of burials, systematic review of faunal collection to remove human remains, and lithic data collection.

*Crew Chief – Chadwick II archaeological inventory of 2600 acres in the Ava District, Mark Twain National Forest – Christian County, Missouri*

Dr. Talcott was responsible for planning fieldwork and led a crew of six to conduct intensive survey and excavation of shovel probes. She was responsible for project logistics and completion of site recordation forms.

*Field Director – University of California, Davis Archaeological Field School – Colusa County, California and Esmeralda County, Nevada*

Dr. Talcott was responsible for organizing and leading a six-week archaeological field school for 20 undergraduate students selected from 5 universities throughout California. Dr. Talcott worked closely with private landowners and local Native American groups. She provided the excavation direction for four archaeological sites during the first three weeks. Dr. Talcott was responsible for leading pedestrian survey in Fish Lake Valley, Nevada for the second three-weeks. Survey identified over 150 pre-contact and historic archaeological sites.

# Ronald Johnson, RPA

## Current Position

Archaeologist/Cultural Resources Specialist

## Discipline Areas

- > GIS: ArcMap & QGIS
- > Trimble Juno & Geo Series
- > Archaeological Survey
- > Site Excavation
- > Construction Monitoring
- > Site Condition Assessment
- > Emergency Response and Support
- > Cultural Resource Inventory and Evaluation
- > Reporting
- > California Department of Parks and Recreation and Intermountain Antiquities Computer System Forms
- > Site Boundary Delineation
- > Artifact/Feature Identification and Recordation

## Years' Experience

8

## Joined Cardno

2018

## Education

- > BS, Anthropology/Archaeology, Kennesaw State University, 2014
- > MA, Anthropology/Archaeology, California State University, Chico, 2020

## Summary of Experience

Mr. Ronnie Johnson is a professional archaeologist who specializes in settlement patterning. His experience includes various projects in the United States and abroad, and he has particular experience throughout California and in northwestern Nevada. Mr. Johnson received his master's degree in anthropology at California State University, Chico, with a focus on archaeology. He has ample understanding of and familiarity with cultural resource management through archaeological monitoring, survey, assessment, and evaluation with multiple consulting firms throughout Southern and Northern California. Mr. Johnson is a current field director on Bureau of Land Management (BLM), US Forest Service (USFS), and US National Park Service (NPS) permits throughout the state. This demonstrates his abilities to identify and assess surface and subsurface archaeological deposits and contribute to evaluations of cultural resources under the National Register of Historic Places (NRHP) eligibility criteria. He has experience working with agencies and private utilities in accordance with local, state, and national preservation guidelines, including the Native American Graves Protection and Repatriation Act (NAGPRA), Archaeological Resources Protection Act (ARPA), and California Environmental Quality Act (CEQA). Additionally, Mr. Johnson has extensive experience adhering to various facility safety protocols and procedures related to fire support, working in confined spaces, and hydroelectric projects.

## Significant Projects

*Field Director/Archaeologist – Southern California Edison (SCE) On-Call Environmental Services – California (2018–Ongoing)*

Mr. Johnson is a current field director for SCE infrastructure replacement and vegetation management projects throughout California including lands administered by the BLM, USFS, and NPS. He is currently the lead for all projects conducted within lands administered by the BLM and NPS. Work includes organizing and coordinating field efforts; performing archaeological survey, site testing, and construction monitoring; and completing and submitting reports to various agency field offices. Additionally, Mr. Johnson provides support and direction for construction by conducting archaeological desktop reviews prior to fieldwork.

*Deputy Project Manager/Field Director – Pacific Gas and Electric (PG&E) Coleman-Red Bluff 60-kV Reconducturing Cultural Resources Support – Tehama County, California (2021–Ongoing)*

Mr. Johnson is the current deputy project manager for the project, which involves the replacement and reconductoring of approximately 268 structures on 16 miles of transmission alignment from Coleman Substation to Red Bluff Substation in Tehama County. His responsibilities include BLM and Native American coordination, records search/archival research, archaeological survey, reporting, conditions and constraints analysis, and geographic information system (GIS) deliverables.

*Project Manager/Field Director – Natomas Levee Reach A Monitoring Project, Landology – Sacramento, California (2021–Ongoing)*

Mr. Johnson assists in the coordination of periodical monitoring for tree removal along the Natomas Levee's Reach A, which extends along the northern side of Garden Highway from Bryte Bend Road to Gateway Oaks Drive. The monitors are looking for any cultural material that may be exposed from this activity, focusing on human remains.

# Attachment B



now



## Affiliations

- > Register of Professional Archaeologists
- > Society for California Archaeology

## Certifications

- > Gold Shovel Standard
- > PG&E Hydro Generation Contractor Safety
- > Adult First Aid/CPR/AED
- > Wilderness Certification
- > Confined Space and Respiratory Protection Awareness

*Cultural Resources Specialist – PG&E Point Work and Project Managed – Central and Northern California (2020–2021)*

Mr. Johnson provided assistance as a cultural resources specialist for two PG&E contracts. His responsibilities included performing online record searches, conducting background research, completing cultural resources constraints reports, and keeping in communication with project managers and all field personnel.

*Field Director – Cultural Resources Inventory and Evaluation for PG&E Kerckhoff Hydroelectric Project Relicensing – Madera and Fresno Counties, California (2019)*

Mr. Johnson participated in archaeological resource inventory and was the field director for the evaluation phase at Kerckhoff Reservoir near North Fork, California. The goal of this project was to identify cultural resources, implement a methodological guide to interpret and evaluate those cultural resources, and apply the NRHP criteria for evaluation. This work was planned and conducted in collaboration with the California State Historic Preservation Officer (SHPO), representatives from the Federal Energy Regulatory Commission (FERC), BLM Bakersfield, Sierra National Forest (SNF), Bureau of Reclamation (BoR), and tribes and tribal representatives (Native American Heritage Commission), and through PG&E's tribal outreach.

*Field Director – Cultural Resources Site Visit for the Greenhorn Sediment Removal at Rollins Reservoir – Nevada County, California (2019)*

Nevada Irrigation District (NID) proposed to implement the Greenhorn Sediment Removal at Rollins Reservoir Project, which includes the annual removal of sediment from the Greenhorn Arm of Rollins Reservoir. Mr. Johnson directed site visits to assess potential effects from implementation of the project. Mitigation measures recommended to minimize potential impacts included implementation of Worker Environmental Awareness Program, NID Cultural Resource Policy No. 6085 and No. 6085.2, and flagging of sites prior to construction activities.

*Archaeologist – SCE Big Creek Upfront Emergency Line Clearing Project – Big Creek and Shaver Lake, California (2018–2019)*

Mr. Johnson assisted in archaeological survey and monitoring for vegetation clearing along transmission lines associated with the Big Creek Hydroelectric Project between census-designated Big Creek and 15 miles southwest toward Visalia, California. This required him to resourcefully communicate with multiple crews and strategically assess which crews to monitor and assist during vegetation removal. This required Mr. Johnson to flag cultural resources that were in the vegetation removal boundaries, perform routine check-ins at each work location, and evaluate cultural resources themselves. Additionally, Mr. Johnson performed desktop reviews and helped coordinate daily responsibilities for archaeologists in the field.

*Archaeologist – SCE Kaweah Hydroelectric Relicensing Project – Three Rivers, California (2018)*

Mr. Johnson participated in assessment of resource issues entailing the protection of cultural resources that are listed in, or eligible for listing in, the NRHP and incorporated information about new historic properties identified within FERC project boundaries. Furthermore, Mr. Johnson identified measures to avoid adverse effects to historic properties, provided cultural resource inventory, identified and relocated known cultural resources, conducted pedestrian surveys, and assisted in preparing and distributing a cultural resource inventory report.

# Shawn G. Fackler, MA, RPA

## Current Role

Cultural Resources  
Practice Group Leader

## Current Position

Principal Archaeologist

## Discipline Areas

- > Data Recovery  
Excavation, Testing,  
and Surveying
- > Project Management
- > Field Coordination  
and Management
- > Historical Analysis,  
Inquiry, and Writing
- > HABS/HAER  
Documentation
- > Bioarchaeology
- > Osteological  
Identification and  
Analysis
- > NHPA Section 106
- > ARPA and NAGPRA
- > NEPA and SEPA
- > GIS/GPS  
Technologies

## Years' Experience

17

## Joined Cardno

2021

## Education

- > MA, Archaeology and  
Historic Preservation,  
University of  
Leicester, UK, 2014
- > BA, Anthropology  
(History minor),  
Arizona State  
University, Tempe,  
2006
- > Certificate in  
Medieval and  
Renaissance  
Studies, Arizona  
State University –  
Tempe, 2006

## Summary of Experience

Mr. Shawn Fackler is a senior-level, Secretary of the Interior-qualified professional archaeologist and historic preservation specialist who has over 17 years of experience managing cultural resources projects. He currently serves as Cardno's Cultural Resources Practice Group Leader in the West. He has extensive experience in managing budgets and contracts; hiring and supervising staff; proposal writing; developing scopes of work; building client relations; and consulting with state and federal agencies, native and tribal representatives, and stakeholders. Mr. Fackler has demonstrated success managing complex cultural resource management projects involving up to 30 personnel in dynamic and challenging settings throughout the American Southwest, Colorado Plateau, Great Basin, Gulf Coast, Hawaiian Islands, and Pacific Northwest, and overseas in Cyprus and Sudan.

Mr. Fackler has exceptional expertise in Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), National Register of Historic Places (NRHP) evaluations, Archaeological Resources Protection Act (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), National Environmental Policy Act (NEPA), Washington State Environmental Policy Act (SEPA), and various state historic preservation laws, regulations, and rules. He is permissible as a principal investigator in Alaska, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington and as a project director in Arizona.

Over the course of his career, Mr. Fackler has authored or co-authored numerous technical reports that include generating research designs, monitoring and data recovery plans, and survey reports prepared in conjunction with project research; site file searches; consultation letters; and Historic American Building Survey/Historic American Engineering Record (HABS/HAER) documentation. He has also performed quality assurance/quality control (QA/QC) of deliverables and is skilled at fieldwork planning and execution, artifact identification, archaeological site and historic property documentation, use of geographic information systems (GIS) technologies, and the preparation and submission of various deliverables. He specializes in bioarchaeological investigations, burial recovery, and human osteological analysis.

## Significant Projects

*Principal Archaeologist – Transmission Environmental Support – Pacific Gas and Electric Company (PG&E) – California (2021-present)*

Mr. Fackler provides senior-level advisement on cultural resources to Cardno's environmental team for various PG&E operations throughout California. The work is performed as part of Cardno's on-call contract.

*Principal Archaeologist – Southern California Edison (SCE) Environmental Support – Edison International – California (2021-present)*

Mr. Fackler provides senior-level advisement on cultural resources to Cardno's environmental team for various SCE operations in California. The work is performed as part of Cardno's on-call contract.



# Attachment B



now



## Professional Registrations

- > Registered Professional Archaeologist, No. 989919

## Certifications

- > 40-hour
- > Hazardous Waste Operations and Emergency Response (HAZWOPER)
- > Transportation Worker Identification Credential (TWIC) cardholder, 2016
- > Archaeological Damage Assessment, Society for American Archaeology, 2014
- > PADI Open Water Diver SCUBA, 2012
- > Section 106 Advanced Seminar, Advisory Council on Historic Preservation, 2010
- > Section 106 Essentials Course, Advisory Council on Historic Preservation, 2009
- > OSHA Construction Safety and Health 10-hour, renewed October 2016
- > Advanced CPR/AED First Aid, renewed 2017
- > Certified Compliance Inspector of Stormwater, 2011
- > Oregon SHPO-designated "Qualified Archaeologist" Oregon Department of Transportation "Qualified Archaeologist"

## Projects Conducted Prior to Joining Cardno

*Principal Investigator and Project Manager – Wickiup Reservoir Cultural Resources Overview, US Fish and Wildlife Service (USFWS) – Deschutes County, Oregon (2020–present)*

Mr. Fackler managed a cultural resources overview in support of the Deschutes Basin Incidental Take Permit and Habitat Conservation Plan in central Oregon. He served as the principal investigator and project manager for the cultural resources overview of a 11,200-acre reservoir. His team synthesized data and reported on 114 cultural resources in a two-volume technical report.

*Principal Investigator and Project Manager – Minidoka National Wildlife Refuge (NWR) Section 110 Cultural Resource Inventory, USFWS – Blaine and Power Counties, Idaho (2020–present)*

Mr. Fackler served as the principal investigator and project manager for a Class III survey of 1,505 acres of NWR within the Snake River Plain, west of American Falls, Idaho. The team relocated 20 previously recorded cultural resources, documented 29 newly identified archaeological sites, and recorded 26 isolated finds.

*Principal Investigator and Project Manager – Clear Lake NWR Cultural Resources Overview and Site Form Updating, USFWS – Modoc County, California (2020–present)*

Responsibilities: served as the Principal Investigator and Project Manager to produce a baseline document on cultural resources and update ten known sites within Clear Lake NWR in northeastern California.

*Principal Investigator – Cultural Resources Inventory of Pleistocene Lake Lahontan, Bureau of Land Management (BLM) Carson City District Office – Churchill County, Nevada (2020–present)*

Mr. Fackler served as the principal investigator for a Class III survey of approximately 500 acres in a particular elevation range, which is the maximum range of latest Pleistocene lake levels in the Carson Sink.

*Principal Investigator – Cultural Resources Inventory of 711 Acres for Vegetation Treatments, BLM, Carson City District, Sierra Front Field Office – Washoe County, Nevada (2020–present)*

Mr. Fackler served as the principal investigator for a Class III survey of 711 acres of BLM-administered land north of Reno.

*Principal Investigator and Project Manager – Greater Sage-Grouse Cultural Resources Survey II, BLM, Prineville District Office – Crook and Deschutes Counties, Oregon (2020)*

Mr. Fackler oversaw a Class III survey of 2,540 acres of BLM-administered land within the northwest portion of the High Lava Plains east of Bend, Oregon. The team identified and recorded 90 new archaeological sites and 63 archaeological isolates.

*Principal Investigator and Project Manager – Juniper Butte Fire Emergency Stabilization and Rehabilitation (ESR) Drill Seedings Cultural Resources Survey, BLM, Twin Falls District, Jarbidge Field Office – Owyhee County, Idaho (2020)*

Mr. Fackler oversaw a Class III survey of 4,563 acres of BLM-administered land within the Snake River Plain, south of Mountain Home, Idaho. The team identified and recorded 29 archaeological sites and 77 archaeological isolates.

# Attachment B

## Kate Gray

Senior Environmental Scientist, Project Manager

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Kate specializes in project management and environmental compliance strategies for complex projects throughout California. Her technical depth encompasses several renewable energy; transportation, including trails; water and wastewater infrastructure; communication infrastructure; restoration and remediation; and other multifaceted infrastructure projects. Kate's environmental regulatory expertise includes California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), Clean Water Act (CWA) Section 404, CWA Section 401, Rivers and Harbors Act (RHA) Section 408, Fish and Game Code Section 1602 (Lake and Streambed Alteration Agreements), State and Federal Endangered Species Acts (CESA and FESA), National Historic Preservation Act Section 106, California State Lands Commission Lease Agreements, National Pollutant Discharge Elimination System (NPDES) permitting, as well as local County and City regulations.

Kate's technical expertise includes fire resiliency planning and assessment, recreation planning and multi-use trail development, and air quality and noise modeling and analyses. She has a strong background in geographic information systems (GIS) and has conducted spatially based analyses for a wide range of projects, including for fire resiliency assessment.

### EDUCATION

M.S., Environmental Science and Policy, Clark University, Worcester, Massachusetts, 2012

B.S., Environmental Studies, University of Oregon, Eugene, Oregon, 2006

### PROJECT EXPERIENCE

Mountain Counties Water Resources Association, Power Fire Fuels Reduction Analysis and Strategic Plan, El Dorado National Forest, California (Environmental Planner, GIS Specialist)\*

Working in collaboration with the Mountain Counties Water Resources Association and the El Dorado Forest Service, Kate assisted with this landscape scale planning project to: (1) assess and prioritize areas for post-fire restoration and fuel reduction treatments within the Power Fire scar; and (2) identify conventional and innovative restoration and biomass treatments using a weighted risk/benefit matrix. This project was grant funded through the National Fish and Wildlife Foundation (NFWF) Northern California Forests and Watersheds Program.

South Yuba River Citizens League and United States Forest Service, Van Norden Meadow Restoration and Recreation Project, Nevada County, California (Environmental Compliance Specialist),

Kate assisted with the environmental compliance strategy and preparation of the ISMND for this restoration and recreation project located in Van Norden meadow, an important Sierra meadow at the headwaters of the South Yuba River. Due to the sensitive cultural and biological resources within the meadow, Kate worked with the SYRCL and USFS to include a recreation component to the proposed restoration project

Truckee Meadows Water Authority, Donner Lake Outlet Channel Emergency Cleanout Project, Truckee, California (Environmental Planner, Project Manager)

Kate was the Project Manager and Permitting Specialist for this emergency dredging project at Donner Lake, CA. Kate was responsible for obtaining emergency permits and CEQA documentation for dredging work in the Donner Lake outlet channel from six regulatory agencies, including the USACE, SHPO, State Parks, Lahontan RWQCB, State Lands Commission, and CDFW.

\* denotes projects completed with other firms

# Attachment B

## Kate Gray

Senior Environmental Scientist, Project Manager

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**Placer County and Truckee Donner Land Trust, Memorial Overland Emigrant Trail/Donner Lake Rim Trail Environmental Compliance Project, Placer County, CA (Project Manager)**

Kate is currently the project manager for this regional multi-use trail project that, once complete, will extend from Donner Memorial State Park westward, over Donner Summit and to the Long Lake trailhead. Stantec completed the biological and cultural constraints analyses on the trail corridor. Kate is now working with CA State Parks and Placer County, as well as the USFS to complete the CEQA and NEPA documentation for the project. Kate is also working to obtain permits for the multiple stream crossings along the alignment. It is anticipated that a CWA non-notifying nationwide 404, CWA Section 401 water quality certification, and FGC Section 1602 (LSAA) will be required.

**El Dorado Irrigation District Upper Main Ditch Piping Project CEQA, El Dorado County, California (Environmental Compliance Specialist)**

Kate provided technical compliance support for the Environmental Impact Report (EIR) for this irrigation canal piping project. She assisted with the quality review of the EIR. She also conducted the air quality modeling using CalEEMod and the noise modeling, as well as developed the associated impact analyses.

**City of Nevada City and Sierra Streams Institute, Little Deer Creek Restoration and Flood Mitigation Project, Nevada City, California (Environmental Planner, Project Manager)**

Kate was the Project Manager and was responsible for all communications with the Sierra Streams Institute and The City of Nevada City. She provided senior review for the CEQA IS/MND that was prepared for the restoration of Little Deer Creek at Pioneer Park in Nevada City, CA

**Nevada Irrigation District Newtown Canal Encasement Project EIR, Nevada County, California (Environmental Compliance Specialist)**

Kate prepared the Initial Study (IS) for the Environmental Impact Report (EIR) in order to determine specific environmental impacts and focus the EIR, resulting in significant cost savings for the client. She led the preparation of the CEQA document. She modeled air quality and greenhouse gas impacts using CalEEMod and prepared the impact assessment. Additionally, Kate assisted with the water quality and hydrology impact assessment, which included evaluating complex studies related to groundwater drawdown.

**Donner Summit Association, Donner Summit Public Use, Trails, and Recreation Facilities Plan, Donner Summit, California (Environmental Planner)**

Kate was the Project Manager and Environmental Planner for the development of the Donner Summit Public Use, Trails, and Recreation Facilities Plan (Plan). She worked closely with the Donner Summit Association and other stakeholders, including the USFS, Truckee Donner Land Trust, and local ski areas, throughout the planning process to develop the Plan. The purpose of the Plan was to develop a comprehensive plan to guide recreation improvements on Donner Summit and provide a framework for near-term and long-term decision-making.

**Truckee River Watershed Council, Sardine Meadow Restoration Project CEQA, Truckee, California (Environmental Compliance Specialist)**  
Kate assisted with the project planning and CEQA QAQC for this alpine meadow restoration project in Truckee, CA. In addition, Kate conducted the air quality assessment and modeling for the CEQA documentation.

*\* denotes projects completed with other firms*

# Attachment B

**Shannon S. Mahoney** Ph.D., RPA

Senior Archaeologist · 17 Years of Experience · Walnut Creek, California

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Shannon has more than 15 years of experience in professional archaeology. Her technical expertise centers on historical archaeology, bioarchaeology, and public engagement. She has served as a field archaeologist for both private and non-profit consulting firms and has served as a field supervisor for academic and compliance projects.

Shannon has considerable experience with Section 106 and Section 110 requirements of the National Historic Preservation Act in California, Nevada, and Virginia, as well as California Environmental Quality Act (CEQA) requirements. She has worked on survey, testing, and data recovery projects under the review of the Bureau of Land Management, National Park Service, Army Corps of Engineers, Department of Defense (Army and Navy), and the California Department of Transportation. She also meets Secretary of the Interior Standards as an archaeologist and a historian.

## EDUCATION

Ph.D., Historical Archaeology, College of William and Mary, Williamsburg, Virginia, 2013

Master of Arts, Anthropology, College of William and Mary, Williamsburg, Virginia, 2004

Associate of Science, Archaeology, Cabrillo College, Aptos, California, 1996

Bachelor of Arts, Anthropology, University of California, Santa Cruz, Santa Cruz, California, 1995

## CERTIFICATIONS & TRAINING

Archaeological Technology Certification, Aptos, California, 1996

Hazardous Waste Operations and Emergency Response, State of Nevada, Nevada, 2011

Surface / Metal / Nonmetal Miner Training, Mine Safety and Health Administration, State of Nevada, Nevada, 2012

#16373, Registered Professional Archaeologist, RPA, United States, 2008

## MEMBERSHIPS

Member, Society for Historical Archaeology

Member, Society for California Archaeology

## PROJECT EXPERIENCE

Yosemite National Park Cultural Fieldwork and Technical Studies , Yosemite National Park, California, United States (2021 – Present)  
Client: Pacific Gas and Electric Company  
In Progress. Shannon is serving as the Principal Investigator for a 2,234 acre cultural resources inventory of the PG&E right-of-way within Yosemite National Park. Shannon applied for and submitted an application for a blanket permit for archaeological investigations that covered work on five different National Parks in northern California including Yosemite. She developed a field protocol in concert with PG&E Cultural Resource Specialists and is directing field efforts to record and update any existing cultural resources and evaluate all sites within the right-of way for listing in the National Register of Historic Places. She will also serve as the lead author in all reporting deliverables.

*\* denotes projects completed with other firms*

# Attachment B

**Shannon S. Mahoney** Ph.D., RPA

Senior Archaeologist · 17 Years of Experience · Walnut Creek, California

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**Phase 1B Archeological Investigation for the Fort Mason Electrical Distribution Rehabilitation Project, City of San Francisco, San Francisco County, California (2021)**

**Client: National Park Service**

Shannon served as the Principal Investigator for a Phase 1B archaeological investigation for the National Park Service at Fort Mason, San Francisco, CA. She authored and submitted the application for the permit for archaeological investigations, coordinated and directed field efforts, completed the laboratory work, prepared items for curation, and served as the primary author on all reporting deliverables. The fieldwork was designed to identify subsurface anomalies using ground penetrating radar and provide better site boundary definition for existing sites using an auger survey. Results were compiled in the final report to provide management recommendations to inform project design that would effectively avoid an adverse effect to a potentially eligible cultural resource.

**Cultural Resources Inventory of 67 Acres for the Fuel Break Project of the San Francisco Public Utilities Commission in Moccasin, Tuolumne County, California, Moccasin, Tuolumne County, California, United States (2020)**

**Client: San Francisco Public Utilities Commission**

Shannon submitted the pre-field Sacred Lands File and Native American Contacts List Request to the Native American Heritage Commission. Shannon also lead an intensive pedestrian survey, updated records for previously recorded sites, identified and recorded new sites, and flagged sites for avoidance. Shannon authored the CEQA-compliant final report with management recommendations.

**Class III Cultural Resources Inventory for the Reno-Stead Water Reclamation Facility Expansion, Washoe County, Nevada, Reno, Nevada (2020)**

**Client: City of Reno**

Shannon lead research, field, and reporting efforts for the archaeological component of the cultural resources inventory for compliance with Section 106 of the NHPA. Research efforts included a review of historic documents, NVCRIS records search, and review of past cultural resources work in the area. The field efforts consisted of an intensive pedestrian survey, relocation of previously recorded sites, identification of new sites, and photographic documentation of structures and buildings for review by an architectural historian. Reporting efforts yielded a Section 106 report, reviewed, and accepted by the Nevada SHPO.

**Site Update and NRHP Evaluation for FS 05-16-51-1095 / CA-TUO-4243H and PG&E Work Area Assessment, Tuolumne County, Stanislaus National Forest, California, United States (2019)**

In 2019, Shannon authored the work plan, directed the field work, and authored the technical report for subsurface testing and a National Register of Historical Places (NRHP) eligibility recommendation for a site crossing a PG&E right-of-way on United States Forest Service (USFS) administered lands.

*\* denotes projects completed with other firms*

# Attachment B

**Shannon S. Mahoney** Ph.D., RPA

Senior Archaeologist · 17 Years of Experience · Walnut Creek, California

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**Class II and Class III Cultural Resources Inventory of 4392 Acres for the Bureau of Land Management's Middle Creek Stewardship Project\*, Lassen County, California, United States (2015 - 2016)**

**Client: Bureau of Land Management, Eagle Lake Field Office**

Shannon planned, staffed, equipped, and directed all aspects of the project. She authored the work plan and directed intensive pedestrian survey of 4,392 acres, site form data entry, and client communications. The survey resulted in the documentation of 71 newly identified sites and 3 newly identified rock stack features, updates of 9 previously recorded sites, and recordation of 49 isolated finds. She provided recommendations for cultural resources with regard to eligibility for listing on the NRHP and was the lead author on the report.

**Supplemental Cultural Resource Evaluation of Construction Camp B for the El Dorado Forebay Dam Modification\*, El Dorado County, California, United States (2015)**

**Client: El Dorado Irrigation District**

Shannon designed the supplemental treatment plan for the archaeological testing and evaluation of a 20th century hydroelectric dam construction work camp for the El Dorado Irrigation District (EID) and conducted historic research on Camp B of the Western States Gas and Electric work camps. Shannon analyzed the artifacts in the field and provided an evaluation of the site for listing in the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR). Shannon co-authored the research design and served as lead author on the report.

**Phase II Inventory and Evaluation of CA-INY-9406 for the City of Bishop Sewer Trunk Replacement\*, Inyo County, California, United States (2014)**

In 2014, Shannon conducted the inventory, subsurface testing, and evaluation for an informal dumping ground for the City of Bishop during the first half of the twentieth century. The site was located on lands managed by the City of Los Angeles and the Los Angeles Department of Water and Power (LADWP). Shannon developing the historic context involved extensive research into the history of Bishop and its infrastructure as well as use of the 1931 P.E. Ritch maps of Owens Valley Land Use and Ownership. Shannon evaluated the site for listing in the CRHR as defined under CEQA. Shannon served as lead author of the technical report. Shannon planned, staffed, equipped, and organized the project. She served in a supervisory capacity for the recordation of an early twentieth century refuse dump and sewage system. Shannon analyzed artifacts in the field, compiled data, and reported on results. Shannon conducted historical research and served as lead author on the report.

**Phase II Archaeological Testing of the Pinto Springs Site, Washoe County, NV \***

**Client: Bureau of Land Management (BLM), Applegate Field Office**

As Senior Archaeologist, conducted subsurface testing within the Pinto Springs Site to identify the potential effects of a proposed cattle corridor on the National Register eligibility of the site. Served as co-author on the final technical report.

\* denotes projects completed with other firms

# Attachment B

## Lisa Beutler

Community Engagement / Outreach / Public Affairs · 37 Years of Experience

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Lisa has more than 37 years of experience in public affairs and public outreach and is nationally recognized for her work with stakeholders. She is the past President of the American Water Resources Association and an expert facilitator that specializes in helping organizations and communities reach decisions and create effective public policy. A former State Park Ranger, Lisa helps clients with strategic thinking, collaborative policy, water resources, and other planning. She has a proven track record leading numerous complex, high-profile projects ranging from water, land-use, and energy planning to off-highway vehicles, technology, substance abuse, and religious conflict resolution. She also has specialized experience working in the Eastern Sierras, particularly Inyo and Mono counties, and with rural communities. Her management portfolio includes organizational development, law enforcement, corrections, and natural resources.

### EDUCATION

BS, Human Relations and Organizational Behavior, University of San Francisco

Quality Management 2 yr. Certification

### MEMBERSHIPS

American Water Resources Association, Past Present, Current Chair of IMPACT Magazine Editorial Board

American Society for Public Administration, Sacramento, Board Member, Awards Committee Chair

Member, American Society for Quality

### PROJECT EXPERIENCE

Sierra Nevada Conservancy 2006 Strategic Plan, California (Executive Facilitator)

Client: Sierra Nevada Conservancy (SNC)

Lisa was executive facilitator and member of a conservancy-led team formed to launch organizational operations and meet the mandates of Public Resources Code Section 3334, which included strategic planning requirements. The 2006 SNC Strategic Plan guided operations through 2010. The plan described the vision, mission, and guiding principles of the SNC and provided a foundation for program development and activities to achieve the Conservancy's vision and mission. Lisa also assisted the SNC in developing performance measures, actions, and project concepts. The plan was created through an open and transparent process that included public workshops (one in each subregion) and SNC board meetings.

State Lands Commission 2021-2025 Strategic Plan, California (Executive Facilitator)

Client: California State Lands Commission -

Prepared in the midst of public health restrictions on in-person meetings, Stantec designed an in-depth virtual outreach process engaging stakeholders across all stakeholder categories and led the outreach and engagement effort for the groundbreaking 2021-2025 Strategic Plan. The Plan creates a call to action with seven focus areas including Leading Climate Activism, Prioritizing Social, Economic, and Environmental Justice, Partnering with Sovereign Tribal Governments and Communities, Meeting Evolving Public Trust Needs, Leveraging Technology, Committing to Collaborative Leadership and Building a Reimagined Workforce. As part of this process Lisa's team conducted over 150 hours of individual interviews and focus groups with key Commission stakeholders and a parallel engagement process with Commission staff. She also administered a statewide survey to gather input from those not able to participate in an interview session and made presentations at two statewide public hearings. She also served as a principal author for the adopted plan.

2020 Strategic Planning Support, California Tahoe Conservancy, Tahoe Region, CA – Executive Facilitator

Client: Tahoe Conservancy

Assisted the Conservancy in developing a stakeholder informed Strategic Planning process

# Attachment B

## Lisa Beutler

Community Engagement / Outreach / Public Affairs · 37 Years of Experience

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for a recent plan update. Interviewed Board Members and Key Stakeholders, conducted stakeholder workshops, and assisted with Board deliberations.

### **California Fire Plan, Sacramento, Statewide, California (Facilitator)**

#### **Client: California Department of Forestry and Fire Protection**

Lisa was the facilitator for a group of outside experts who convened to complete a needs assessment leading to preparation of the 2010 California Fire Plan. The Fire Plan is the state's strategic plan road map for reducing the risk of wildfire, particularly in the wildland urban interface. The 2010 Strategic Fire Plan is a strikingly different fire plan than those developed in the past. This plan recognizes that fire will occur in California and works to answer the question of how to utilize and live with that risk of wildfire.

### **United States Department of Agriculture, Forest Service & California, Statewide, California (Executive Facilitator)**

#### **Client: Off-Highway Motor Vehicle Recreation Division (OHMVRD), & Bureau of Land Management**

Lisa was executive facilitator for numerous stakeholder informed efforts to implement travel management plans and inform environmental mitigation, sound, and soils standards on federal and state lands. Lisa also supervised staff working on Timber Harvest Plans and has extensive experience working with the Stanislaus National Forest, primary location of the 2013 Rim Fire, where she provided volunteer assistance to support the Public Services Team that works on fire recovery.

### **Emergency Plan Development, Statewide, California (Supervisor)**

#### **Client: California Department of Corrections and Rehabilitation (CDCR)**

Lisa was the supervisor of the collaboration team assigned to CDCR for preparation of an emergency plan compliant with the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). These compliance standards are based on federal requirements generated as a result of Presidential directives. Lisa provided executive support in conducting field activities and issues associated with plan development.

### **Lake Tahoe Pathway, Lake Tahoe Basin, California, Nevada (Executive Facilitator, 2007)**

#### **Client: USACE, Nevada Division of Environmental Protection (NDEP), Tahoe Regional Planning Agency (TRPA), U.S. Forest Service, and Lahontan Regional Water Quality Control Board**

Lisa was the contract manager and managing senior mediator for this project, overseeing the collaborative coordination and process to merge the Tahoe Regional Planning Agency's Regional Plan Update, the U.S. Forest Service (USFS) Forest Plan for the Lake Tahoe Basin, and the Lahontan Regional Water Quality Control Board, and Nevada Division of Environmental Protection Total Maximum Daily Load (TMDL) process. She oversaw the facilitation team conducting public meetings and other outreach. Lisa managed a multi-state collaborative effort involving hundreds of stakeholders. She received a joint award of excellence for this project from the US Army Corps of Engineers and the Tahoe Regional Planning Agency, the only one of its type ever awarded.



# Kendra Ryan

## Current Position

Senior Consultant/  
CEQA Leader

## Discipline Areas

- > CEQA
- > CPUC
- > NEPA
- > NRC Environmental Compliance

## Years' Experience

25

## Joined Cardno

2014

## Education

- > BS, Landscape Architecture, University of California, Davis, 1990

## Affiliations

- > Association of Environmental Professionals, Former Chapter President
- > Association of Women in Water, Energy & Environment
- US Women in Nuclear

## Summary of Experience

As an environmental professional for more than 30 years, Ms. Kendra Ryan has a wide range of experience preparing and managing environmental documents for projects of varying size and complexity. With a background in the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), she provides strong management, technical support, and quality assurance/quality control (QA/QC) of environmental documents required for regulatory permitting and licensing activities for various utilities, including electric, oil and gas, hydroelectric, nuclear, and wind. She has proven experience maintaining schedule and budgets on fast-track and controversial projects. Ms. Ryan excels at developing effective and personal communication with clients.

## Significant Projects

*Project Manager – Phillips 66 Rodeo Renewed Project, EIR (SCH # 2020120330) – Northern California*

Ms. Ryan serves as the Project Manager for preparation of the EIR on this highly controversial and complex refinery project. The Rodeo Renewed Project would transform the existing Rodeo Refinery into a facility that would process renewable feedstocks into renewable diesel fuel, renewable components of other transportation fuels, and renewable fuel gas. The modified facility would mostly use existing process units, converted to handle the new feedstocks, and existing storage facilities, supplemented by a new renewable feedstocks pre-treatment unit and limited other new equipment. Several of the existing refinery tanks would be converted to the storage of the non-regulated renewable feedstocks, finished distillates, and gasoline blendstocks. Primary issues relate to increased Marine Terminal importing and exporting, marine biological resources, air quality and human health, GHG emissions, and energy consumption.

*Program Manager – State Water Resources Control Board, CEQA/Research and Analysis On-Call*

Cardno was recently awarded a 5-year on-call contact with the State Water Board to support the Clean Water Act 401 Water Quality Certification (WQC) Division. Ms. Ryan is the Program Manager who will be directing various project teams supporting the State Water Board with CEQA compliance and other environmental resources studies related to issuance of WQCs. In addition, the program includes providing technical peer review of resource studies, public outreach and facilitation, AB 52 consultation, conflict resolution between the State Water Board and WQC Applicants (i.e. PG&E, SCE, etc.), and representing on behalf of, or collaboration with, the State Water Board on water rights petitions.

*Project Manager / Technical Contributor – SCE Big Creek Alternative Licensing Process (ALP) Project Rush Creek (FERC Docket Nos. P-67, 2175, 2085, and 120) and Kaweah Facilities (FERC Docket #298) Hydroelectric Relicensing / SCE San Onofre Nuclear Generating Station (SONGS) (NRC License #NPF10 & 15), Fermi 2 (NRC Docket #05000341), Watts Bar (NRC License #NPF 96), and Honeywell Metropolis Works Plant Environmental Reports (NRC License #Sub 526) Supporting Nuclear Relicensing – California, Tennessee, Michigan, Illinois*

Ms. Ryan was responsible for the management of or technical contributor to agency-required environmental reports supporting the utility applicant's licensing, relicensing, or

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decommissioning applications for nuclear and/or hydroelectric projects. These documents provided the basis for the Nuclear Regulatory Commission (NRC) and the Federal Energy Regulatory Commission (FERC) to conduct their own NEPA documentation. The full range of NEPA environmental issues were addressed, in addition to meeting specific requirements of the FERC and NRC. A significant challenge was to synthesize volumes of nuclear and hydroelectric engineering studies into easily understandable project descriptions, as well as lead multidisciplinary teams of technical specialists.

*Project Manager – State Water Resources Control Board, CEQA Documentation for Water Quality Certifications on Hydroelectric Projects – Northern California*

As part of the Federal Energy Regulatory Commission hydroelectric re-licensing or decommissioning process, utilities are required to obtain a Water Quality Certification under Section 401 of the federal Clean Water Act. Issuance of a Water Quality Certification requires compliance with CEQA. Ms. Ryan served as the project manager for: three PG&E CEQA documents addressing the Water Quality Certification including McCloud-Pit, Kilarc-Cow, and Pit 1 Hydroelectric Projects; SCE's Kaweah Project; and Rugraw LLC's Lassen Lodge Project. These analyses focused on the overall effect on water quality and whether the designated beneficial uses identified in relevant Basin Plans are adequately protected under CEQA.

*Program Manager - PG&E Electric Transmission Group CEQA/Environmental Permitting Support, Northern California*

Ms. Ryan served as the Program Manager of the 3-year contract to provide CEQA and Environmental Permitting support to PG&E's Sacramento electric transmission group. She was responsible for ensuring each project was properly evaluated for potential environmental and permitting issues related to biological, cultural, and water quality resources, and hazardous materials. She led a team that prepared numerous PG&E documents as part of the CPUC environmental release to construct process. Projects primarily related environmental clearance for pole replacement and relocation, and upgrading distribution lines.

*Program Manager – PG&E Vegetation Management Program – Northern California*

Ms. Ryan ensured QA/QC of numerous documents associated with this program. The main challenge was to ensure the technical adequacy of a high weekly volume of environmental documents. Cardno staff conducted desktop cultural and biological resources constraints reviews along varied linear stretches of transmission lines, reviewing all existing and relevant information available (e.g., PG&E Map Guide, Google Earth, historical maps, prior studies, aerial and project photos, reconnaissance surveys).

# Grant Schmitz

## Current Position

Senior Project Engineer

## Discipline Areas

- > Civil Engineering
- > Project Management
- > Land Development
- > Grading and Drainage
- > Construction Documents
- > ADA Accessibility
- > Pavement Rehabilitation

## Years' Experience

7

## Joined Cardno

2021

## Education

- > BS, Civil Engineering, University of Oklahoma, 2014

## Certifications

- > NCEES Professional Engineer, April 2019
- > Engineer-In-Training

## Summary of Experience

Mr. Grant Schmitz is a civil engineer and project manager with a demonstrated history of quality design and project management for a diverse range of municipal and transportation projects. He has experience with full project implementation, including the development of alternatives; concept plans; 30, 60, and 90 percent design plans; construction documents; technical specifications; and cost estimates. Mr. Schmitz has served as the civil project engineer and/or project manager on a variety of design teams in order to provide innovative solutions for clients. As a civil engineering consultant, he has been responsible for project planning; project design; preparation of reports; specifications and cost estimates; engineering studies; project bidding and construction management. Through his successfully completed projects he has gained substantial experience in the areas of municipal development, pavement assessment/rehabilitation, ADA compliance, commercial site development, stormwater and drainage, sanitary sewer systems, and recreational improvement projects. Mr. Schmitz manages the Bishop, California Cardno office and is the primary engineering contact for Cardno in Inyo and Mono County.

## Significant Projects

### *Project Engineer – PCWA French Meadows Campground – Foresthill, California*

Mr. Schmitz assisted with quality control review and technical specification development for the construction of French Meadows Campground located in the Tahoe National Forest (TNF) on French Meadows Reservoir. The campground consists of 75 campsites on two main loops. The design will take the concept plan and create a set of plans for the construction of the campground. The Cardno team worked with TNF to create a campground that will maintain camper amenities while preserving the natural landscape of the forest.

### *Expert Witness Consultation – Erosion Control and Infrastructure Consultation – California Fire (Confidential Client)*

Mr. Schmitz served as a technical consultant and provided expert services for three separate Northern California wildfires, assessing fire damage to site infrastructure and resulting erosion issues at numerous residential and commercial sites, as well as, public facilities. Mr. Schmitz wrote numerous reports that that helped lead to the successful settlement of these individual cases.

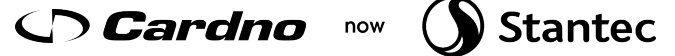
### *Project Manager and Engineer – Laurel Mountain Road Rehabilitation and Sidewalks – Mammoth Lakes, California*

Cardno is providing civil roadway design and bid support for the rehabilitation of Laurel Mountain Road in Mammoth Lakes, California. The project will rehabilitate 1,800 linear feet of existing roadway to address the deterioration of existing asphalt pavement, construct new storm water infrastructure, curb and gutter, and adjust roadway geometrics and striping to formally delineate traffic lanes, on-street parking and class 2 bicycle lanes. The project will also increase pedestrian safety by constructing new pedestrian sidewalk, crossing striping and beacons and ADA accessible ramps.

### *Civil Design – Pittsburg San Marco Trail – Pittsburg, California*

The approximately 1,000 feet long trail included a prefabricated steel truss pedestrian bridge with concrete deck spanning a man-made drainage channel. TranSystems was responsible to design the abutment and wing walls for the bridge. The project presented

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some difficult grading challenges by having to comply with ADA guidelines for sidewalks and Class 1 trail design guidelines within the constraints of an adjacent steep embankment slope, differing elevations on either side of the channel and maximum bridge profile. As a civil team member, Mr. Schmitz provided civil design alternatives in exploring feasible solutions to the grading challenges and modeled the grading design in AutoCAD Civil 3D.

*Project Manager and Civil Designer – East Bay Regional Park District Tidewater Use Area – Oakland, California*

TranSystems provided civil and electrical design and construction support services for new park land on East Bay Regional Park District (EBRPD) property adjacent to the existing Tidewater Boating Center. The project involved renovating the eight-acre parcel previously leased to Flexi-Van, a truck chassis leasing company, to include Bay Trail realignment, tree massing, picnic areas, meadow areas, a 125-stall parking lot, a boat storage area and a new restroom building. Unique features of this \$8M project included raising site grades to meet year 2070 sea-level rise, providing electric vehicle charging stations, and soil surcharging of the site prior to construction of final improvements. Design services included grading and drainage plans and details, stormwater management and treatment, interim grading plan and utility relocation for the initial soil surcharging phase, erosion control plans and details, parking lot and storage yard layout, wet utility design, structural details, construction phasing and implementation of the challenging geotechnical recommendations; site lighting, restroom power, electric vehicle charging station design and new electric service to support the new infrastructure. New improvements to be completed in 2023. Mr. Schmitz was responsible for all civil design related to grading, stormwater drainage, construction demolition and construction phasing for the site. He worked with the Landscape Architect and EBRPD to find innovative site solutions that would provide a unique solution to a challenging site.

*Project Engineer – PCWA French Meadows North Shore Road – Foresthill, California*

Mr. Schmitz performed a roadway condition assessment of French Meadows Reservoir North Shore Access Road (Forest Road [FR] 42-02) for Placer County Water Agency (PCWA) as a part of the Transportation System Management Plan (TSMP). Mr. Schmitz performed a field visit to the roadway to capture an assessment of the overall roadway condition, pavement defects and its associated drainage structures. The project then provided a condition report in order to identify specific issues and provide rehabilitation recommendations for PCWA. The French Meadows Reservoir North Shore Access Road (FR 42-02) is 1.31 miles long and provides access to campgrounds, picnic areas and a boat ramp along the reservoir.

# Michelle Hochrein

## Current Position

Project Environmental Scientist

## Discipline Areas

- > Wetland Delineations
- > Botanical Special-Status Species Surveys
- > Riparian and Wetland Restoration
- > Botanical Assessments and Evaluations
- > GIS and Environmental Data Management
- > Post-Fire Ecosystem Analysis and Restoration
- > Tribal/Federal Consultation
- > Botanical Invasive Species Mapping and Management
- > Environmental Regulatory Compliance and Permitting

## Years' Experience

10

## Joined Cardno

2017

## Education

- > MS, Geography, University of Nevada, Reno, 2013
- > BLA, Landscape Architecture, California Polytechnic State University, San Luis Obispo, 2007

## Summary of Experience

Ms. Michelle Hochrein has extensive experience with riparian and wetland surveys, including biological field assessments and environmental monitoring, special-status plant surveys, wetland delineations, and mobile geographic information system (GIS) mapping. Ms. Hochrein's expertise is focused on Sierra Nevada natural community ecology, taxonomy, and riparian health assessments. She applies this expertise to the development of riparian monitoring plans and designing and overseeing the implementation of riparian and wetland restorations and monitoring programs.

Ms. Hochrein is adept with California Natural Diversity Database (CNDDB), Biogeographic Information and Observation System (BIOS), and Survey of California Vegetation Classification and Mapping standards, and statutes and regulations related to plants and plant collection. She has experience leading field teams in Stream Condition Index (SCI), Surface Water Ambient Monitoring Project (SWAMP) and Proper Functioning Condition (PFC) protocols. Her experience with regulatory compliance and permitting includes multi-jurisdictional Clean Water Act (CWA) permitting (under Sections 404 and 401), National Pollutant Discharge Elimination System (NPDES) and Waste Discharge Requirements (WDR) permitting and requirements, and California Department of Fish and Wildlife (CDFW) Section 1602 Lake or Streambed Alteration (LSA) permitting. She assists with Endangered Species Act (ESA) Section 7 consultation, California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA)-compliant statements, providing expertise in project impacts on hydrology, wetlands, soils, vegetation and forest resources, and wildlife. Additionally, she has substantial experience with tribal/federal consultation and initiating tribal involvement in environmental projects.

## Significant Projects

*Lead Wetland Delineator – Bureau of Reclamation: Battle Creek Salmon and Steelhead Restoration Wetland Delineation and CWA Permitting – Tehama County, California*

Ms. Hochrein conducted wetland delineation of riparian and wetland project areas in support of CWA permitting. She calculated impact quantities and developed project in-situ mitigation of restored and enhanced waters features. She also consulted with the US Army Corps of Engineers (USACE) on Preliminary Wetland Determination and CWA permitting.

*Botanist – Washoe Tribe: Hung A Lei Ti Walking Path Biological Surveys – Sierra Nevada, California*

Ms. Hochrein conducted surveys of special-status plant species and noxious weeds according to CDFW and Bureau of Land Management (BLM) protocols. Ms. Hochrein recorded plant community species lists and mapped noxious weeds by species and cover in support of a joint Bureau of Indian Affairs (BIA) and BLM Environmental Assessment (EA) and Weed Management Plan.

*Botanist – Washoe Tribe: Meeks Meadow Restoration Planning – Tahoe Basin, California*

In partnership with the US Forest Service and the Washoe Tribe, Cardno developed restoration plans for a 300-acre conifer-invaded meadow at Lake Tahoe. Ms. Hochrein assisted with the development of environmental permitting documents, including NEPA Biological Assessment updates per species changes under the ESA, Tahoe Regional Planning Agency Environmental Improvement Program (EIP) checklist, and Lahontan Timber Waiver permit. Restoration plans included conifer removal, prescribed fire, riparian

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## Trainings and Certifications

- > Swift Water Rescue Trained
- > 40-hour Wetland Delineation Trained
- > Nevada Conservation Credit System GIS and Field Certified
- > California Plant Voucher Collecting Permit No. 2081(a)-21-062-V

## Affiliations

- > Tahoe Nordic Search and Rescue Team Member
- > Nevada Water Resources Association Member
- > Nevada Weed Management Association

monitoring, and culturally significant vegetation restoration. Ms. Hochrein developed vegetation management and botanical monitoring plans, trained teams on botanical monitoring protocols and species identification, and coordinated tribal involvement.

*Riparian Ecologist – PG&E: Mokelumne River Riparian Surveys – Mokelumne River, California*

Ms. Hochrein conducted riparian vegetation monitoring and topographic surveys on bypass and control reaches of the Mokelumne River. She led the field team on monitoring protocols, plant identification, safety coordination, and data entry.

*Lead Wetland Delineator – City of South Lake Tahoe: Tahoe Valley Greenbelt and Stormwater Improvement Project Wetland Delineation and CWA Permitting – Tahoe Basin, California*

Ms. Hochrein conducted wetland delineation of construction limits in support of project CEQA and CWA permitting. She calculated impact quantities and developed a temporary restoration plan. She led consultation with USACE on Preliminary Wetland Determination and CWA permitting.

*Restoration Manager – El Dorado Irrigation District: Caples Spillway Stabilization Construction and Monitoring – Sierra Nevada, California*

Ms. Hochrein provided biological expertise and oversight for the harvest and planting of live willow poles and wattles along incised channel sections. She oversaw and guided the installation of embedded log and rock stabilization material and conducted during-construction and post-construction monitoring of permit conditions, stabilization methods, and vegetation cover and survival.

*Botanist/Wetland Ecologist – Placer County Water Agency Environmental Surveys – American River Watershed, California*

Ms. Hochrein conducted surveys of special-status plant species (i.e., threatened, endangered, sensitive, rare, or other special-status plant species) on Placer County Water Agency project areas according to CDFW and Tahoe National Forest protocols. She provided analysis and mitigation in technical memoranda and Botanical Evaluations/Assessments and conducted wetland delineations for recreation and infrastructure improvements in support of CWA permitting.

*Lead Wetland Delineator – Placer County Water Agency: Reservoir Facility Improvements – Sierra Nevada, California*

Ms. Hochrein conducted wetland delineations at multiple locations near French Meadows Reservoir and Hellhole Reservoir to support facilities improvement projects. She assisted with related USACE and CDFW permitting.

*Wetlands Biologist – Southern California Edison: On-Call Environmental Services – Southern Sierra Nevada, California*

Ms. Hochrein provides programmatic guidance for projects in wetlands across SCE's service area. She develops field manuals and guidelines for wetland surveys and environmental monitoring; develops process and procedure manuals for impact analysis, environmental clearance, and permitting; develops individual project-level restrictions and mitigation recommendations; develops and submits USACE CWA 404 permits, State Water Resources Control Board CWA 401 permits, and CDFW LSA permits for projects with impacts to jurisdictional wetlands; and conducts expedited analysis for high fire circuits with large volumes of work locations. She also leads coordination with SCE and agency environmental staff on projects and recommendations.

# Melanie Greene, AICP, CPESC, QSD/P

## Current Position

Senior Project Scientist

## Discipline Areas

- > Environmental Planning
- > CEQA and NEPA Clearance
- > Permit Acquisitions
- > Environmental Compliance
- > Community Outreach and Public Engagement
- > Water Quality Monitoring and Analysis
- > SWPPPs
- > Biological Surveys
- > Erosion and Sediment Control
- > Stream Condition Inventories and California Rapid Assessment Methodology
- > Riparian and Wetland Delineation

## Years' Experience

20

## Joined Cardno

2018

## Education

- > MS, Watershed Science, Colorado State University, 2003
- > BS, Applied Biology, Georgia Institute of Technology, 1995

## Certifications

- > 40-hour USACE Wetland Delineation Certification, Wetland Training Institute, 2016

## Summary of Experience

Ms. Melanie Greene brings over 20 years of expertise as a water resource specialist, with 15 years of those years working in environmental planning, responsible for the preparation of Tahoe Regional Planning Agency (TRPA), National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA) documentation and associated fieldwork, data collection, analysis, and mitigation monitoring and reporting programs. Ms. Greene has experience defining core values, visioning statements, goals and policy frameworks, and developing open and transparent public engagement strategies, including effective methods for scoping and public outreach and the timely dissemination of data-supported and fact-based information to explain complex and at times controversial projects and plans. Ms. Greene's approach to project planning focuses on collaboration and transparency, comprehensively collecting, documenting and responding to oral and written public comments, followed by presentation of clear responses, to regulatory and community institutions, leaders, and decision-making bodies. Ms. Greene specializes in development of comprehensive yet succinct narrative project descriptions and the quantification of potential impacts to jurisdictional waters of the US, waters of the State and instream and riparian habitats, and resultant compensatory mitigation, when applicable. Ms. Greene peer-reviews and also develops compliance monitoring and reporting programs, erosion and sediment control plans and SWPPPs, diversion plans and dewatering and discharge plans, manages field crews for compliance monitoring, and prepares final reports for project closeout.

## Significant Projects

*Planner and Scientist – Environmental Planning, Review, and Clearance Projects – California and Nevada*

Ms. Greene prepares public noticing and outreach documents and plans and participates in design charrettes, public workshops, scoping, and town hall meetings to provide individualized and transparent communications with stakeholder group representatives, regulatory staff, and boards and commissions. Ms. Greene specializes in the preparation of defensible, joint environmental documentation. She prepares CEQA-compliant initial studies (IS), negative declarations (ND), mitigated negative declarations (MND), and environmental impact reports (EIR) with expertise in hydrology, water quality, groundwater, geology, soils, seismic, hazardous materials, and cumulative effects analyses. She also prepares NEPA documentation, including categorical exclusions and environmental assessments (EA), and the water quality, hydrology, groundwater, geology, soils, and seismic resource sections of environmental impact statements (EIS). Specific projects, current and dating back to 2004, include:

### California Tahoe Conservancy, CA

- > South Tahoe Greenway Shared-Use Trail Project IS/MND/IEC

### City of Bishop, CA

- > Sewer Trunk Replacement Project IS/ND and Permit Acquisition (CWA 404, CWA 401 WQC, CDFW LSAA, Caltrans Encroachment)

### City of South Lake Tahoe, CA

- > Ski Run Center Stormwater Quality Monitoring and Report (Current)
- > Tahoe Valley Greenbelt and Stormwater Improvement Project IS/MND/IEC and Permit Acquisition

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- > American Institute of Certified Planners (AICP), No. 028732, 2015
- > California Notary Public, No. 2051299, 2013
- > Qualified Developer and Practitioner of Stormwater Pollution Prevention Plans (QSD/QSP), No. 22314, 2011
- > Certified Professional in Erosion and Sediment Control (CPESC), No. 6120, 2010
- > 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER), since 1999

- > Lake Tahoe Boulevard Shared-use Trail Project IS/ND/IEC

- > AI Tahoe Safety and Mobility Project IS/ND/IEC and Permit Acquisition

## **Douglas County Sewer Improvement District/South Tahoe Public Utility District, NV and CA**

- > Sanitary Sewer Intertie Project IS/ND/IEC, TRPA Linear Public Facility Project Permit, TRPA Soils Hydrologic Waiver, and Douglas County Site Improvement Permit Acquisitions

## **Heavenly Mountain Resort, CA/NV**

- > Master Plan Development – Ski Trail Widening and Run Hazard Reduction Project, NEPA EA

- > Epic Discovery Project EIS/EIS/EIR

- > Heavenly Mountain Resort Master Plan Amendment EIS/EIS/EIR

## **Placer County, CA**

- > Tahoe City Downtown Access Improvements Project Design and IS/ND/IEC (Current)

- > Placer County's North Tahoe Bike Trail/Dollar Creek Shared-use Trail Project IS/ND/IEC

- > Homewood Mountain Resort Ski Area Master Plan Draft and Final EIR/EIS/EIS

## **Southern California Edison, CA**

- > CWA 404 and CWA 401 WQC Permit Acquisition, Monitoring and Reporting and CDFW LSAAs for Various Federal Energy Regulatory Commission (FERC) and Hydropower Infrastructure Operations and Maintenance Projects (Current)

## **South Tahoe Public Utility District, CA**

- > Keller-Heavenly Water System Improvement Project IS/MND

- > Replacement Generator Project IS/ND/IEC

- > Water Meter Installation Project IS/ND/IEC

- > Headworks Replacement Project IS/MND/IEC, SWPPP Development, CWA 404 and CWA 401 WQC Permit Acquisition, Monitoring, and Reporting

- > Angora Creek Pipeline Replacement Project IS/MND/IEC

- > Recycled Water Facilities Master Plan EIR

- > Recycled Water Facilities Master Plan Supplemental EIR

- > Recycled Water Facilities Master Plan CEQA Plus Documentation

- > Indian Creek Reservoir Total Maximum Daily Load and Oxygenation System IS/ND

## **Tahoe Regional Planning Agency, CA/NV**

- > Ultraviolet-C Light Aquatic Invasive Plant Control Pilots – Project Management Assistance, Monitoring, and Reporting under Contract with Inventive Resources, Inc. (Current)

- > South Tahoe Event Center EA

- > Luther Pass Pump Station EA

- > Bayview Well EA

- > Monitoring, and Reporting

## **Washoe Tribe of NV and CA**

- > Mayala Wata Restoration Project at Meeks Meadow IS/ND, Timber Waiver Category 6 Permitting, TRPA IEC and EIP Permitting, CDFW Watershed Restoration Grant Application Development, Groundwater Monitoring Planning, and Elder Trail Concept Plan Development (Current)

- > NEPA Environmental Clearance for Department of Housing and Urban Development Indian Community Block Grants



# Brian E. McRae, PE, QSD/QSP

## Current Position

Senior Consultant

## Discipline Areas

- > Civil Engineering
- > Permitting
- > Recreational Facility Planning and Design
- > Water Infrastructure
- > Agency Coordination

## Years' Experience

25

## Joined Cardno

2018

## Education

- > BS, Civil Engineering, California Polytechnic University, 1995

## Professional Registrations

- > Professional Civil Engineer, California, No. 59100
- > Professional Civil Engineer, Nevada, No. 14393

## Certifications

- > Qualified SWPPP Developer/Practitioner
- > Tahoe Area Mountain Bikers Association – Trail Crew Leader

## Affiliations

- > American Society of Civil Engineers (past President)
- > American Public Works Association
- > International Erosion Control Association
- > Kit Carson Youth Cycling (board member, President)

## Summary of Experience

Mr. Brian McRae is a Senior Consultant at Cardno and has over 25 years of civil and environmental engineering and planning experience. He specializes in managing large multifaceted design projects involving numerous professional disciplines and guiding them through complex permitting environments. He has a solid professional history of delivering projects efficiently, meeting and exceeding the goals and expectations of public and private clients alike. Mr. McRae takes pride in designing projects that achieve full functionality and performance while maintaining a subtle quality in aesthetic. Mr. McRae's professional experience has focused on planning, design and implementation of recreation facilities, bike trails, campgrounds, day-use/picnic areas, stormwater quality facilities, erosion control and BMPs, stream/river/wetland/habitat restoration, water/wastewater infrastructure, and commercial and municipal site design. Mr. McRae has performed and coordinated this work for numerous local state and federal agencies including USFS, US Fish and Wildlife Service (USFWS), US Army Corp of Engineers, California Tahoe Conservancy, Tahoe Resource Conservation District, TRPA, California Regional Water Quality Control Boards, Caltrans, California Department of Fish and Wildlife, California State Parks, and local towns and counties.

## Significant Recreation, Site, and Shared-use Path Projects

*Senior Consulting Engineer – Hell Hole Reservoir Workstation and Workforce Campground – Hell Hole Reservoir, California*

Mr. McRae led the design and engineering management for a new Forest Service 3,000 square-foot workstation and 25-unit RV workforce campground with full hookups.

*Senior Consulting Engineer – South Lake Tahoe 56-Acre Parcel Masterplan and Renovation, South Lake Tahoe California*

Mr. McRae led the design, engineering management, for the masterplan and renovations of the 56-Acre Parcel Campground and Recreation Center Project in South Lake Tahoe, CA. Renovations include re-design of the 180-unit campground for RV hookups, tent only sites, amphitheater, historical exhibits, glamping sites, and access to a new recreation center and aquatic facility, library, ballfields, beach, and commercial core area.

*Senior Consulting Engineer – Spooner Front Country Improvements Visitor Center and Day-use Facilities – Spooner State Park, Lake Tahoe, Glenbrook, Nevada*

Mr. McRae led the design and engineering management for the renovation of this visitor center, group pavilion and recreation area, concession buildings, picnic area, summer and winter trailhead, fishing pier, non-motorized boat launch, associated parking and access, and public water system at Spooner Lake State Park, NV.

*Senior Consulting Engineer – Eastwood Visitor Information Site Renovation – Huntington Lake, California*

Mr. McRae led the design and engineering management of the renovations of this visitor information center, powerhouse overlook, and picnic area at Huntington Lake, CA. Renovations include the design automobile and RV parking; picnic sites; providing a new water supply and distribution to the site; and ADA access.

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> Tahoe Area Mountain Bikers Association Carson City "Muscle Powered" bicycle and pedestrian mobility advocacy group

*Senior Consulting Engineer – Jackass Meadows Campground and Florence Lake Boat Ramp and Day Use Picnic Area – Florence Lake, California*

Mr. McRae led the design, engineering management, Forest Service, and agency coordination for the renovations of the Jackass Meadows Campground and Boat Ramp projects at Florence Lake, CA, CA. Renovations include the design of a 56 unit campground and associated accommodations, and the design of the boat ramp parking area and associated day-use picnic sites.

*Senior Consulting Engineer – Mammoth Pool Campground and Boat Ramp, Big Creek, California*

Mr. McRae led the design, engineering management, Forest Service, and agency coordination for the renovations of the Mammoth Pool Campground and Boat Ramp projects at Mammoth Pool Reservoir near Big Creek, CA. Renovations include the design of a 47-unit campground and associated accommodations, and the design of the boat ramp parking area and associated day-use picnic sites.

*Senior Consulting Engineer – Mammoth Pool Powerhouse Angler Access Improvements, Big Creek, California*

Mr. McRae led the design, engineering management, Forest Service, and agency coordination for the renovations of the parking area and angler access improvements at the Mammoth Pool Powerhouse along the San Joaquin River near Big Creek, CA. Renovations include the design of a parking area and access stair improvements to provide recreational and fishermen's access to the San Joaquin River.

*Project Manager/Engineer – Yosemite National Park, Merced River Restoration – Yosemite, California*

Mr. McRae led the design, of the streambank stabilization along the Merced River at Housekeeping Camp, provided design for bank stabilization at the RV dump station at North Pines Campground and provided conceptual design for restoration of the "Swinging Bridge" site in Yosemite Valley.

*Project Engineer/Manager – Nevada Stateline to Stateline Bikeway Phase 1D Laura Drive Shared-use Path and Complete Street Project – Stateline, NV*

Mr. McRae led the design and permitting effort for this urban shared-use path and complete street project. The project entailed 800 feet of shared-use path coupled with the corresponding distance of road diet/complete street renovation of Laura Drive. Design efforts included ADA access for Laura Drive and the Shared-use path, water quality improvements, utility relocation design, and amenities. Mr. McRae managed the design to conform to the NDOT LPA process.

*Project Engineer/Manager – Nevada Stateline to Stateline Bikeway Phase 1C South Demonstration Project – Stateline, NV*

Mr. McRae Provided design and led the permitting efforts for this mile long shared-use path that connected Elks Point Road with Roundhill Pines Beach. The path traversed steep, rocky terrain requiring retaining walls for much of its length. The project was delivered as a Construction Manager at Risk (CMAR) process with the Nevada Department of Transportation as the lead agency. Mr. McRae managed the permitting effort with multiple agencies including the TRPA, US Forest Service, Douglas County, and Nevada Department of Transportation.

# David Martinez

## Current Position

Senior Environmental Resource Planner

## Discipline Area

- > Outdoor Recreation Facility and Open-space Planning & Design
- > Recreation Visitor Needs Assessment
- > Outdoor Recreation Facility Management
- > Public Process and Facilitation
- > Recreational
- > In-stream Flow Assessment & Management
- > Lake / Reservoir Recreational Resource Assessment & Management
- > Wetland Habitat & Special-status Species Mitigation
- > Public Process Facilitation and Agency Consultation
- > CEQA/NEPA Documentation

## Years' Experience

37

## Joined Cardno

1996

## Education

- > MS, Outdoor Recreation Resource Planning, California State University, Sacramento
- > BA, Environmental Studies & Planning, California State University, Sonoma

## Summary of Experience

Mr. Martinez has been professionally involved with recreation and environmental resource planning projects for 37 years. His experience includes program and project management ranging from watershed-scale projects requiring integration of multiple resource demands, to the development of focused mitigation measures for specific projects.

Beginning in 1984 as a City of Roseville (California) park planner, David's professional experience includes working with the California Department of Parks and Recreation (CDPR), the California Wildlife Conservation Board (WCB), and The Nature Conservancy (TNC). He was a key staff member for development of CDPR's strategic plan, Directions: A Focus For Action, the Auburn State Recreation Area Interim General Plan, and was the first "District Planner" for CDPR. At the WCB, he served as the program manager for the California Riparian Habitat Conservation Program, and at TNC as the Director for the Cosumnes River Watershed Project. His private-sector experience includes development of mitigation banks and owning/operation of a campground/resort in the California foothills along the South Fork American River.

During Mr. Martinez's tenure with Cardno, he has been the recreation technical lead for a dozen FERC hydropower project relicensing efforts. In addition, he is the Program Manager for Cardno's Recreation Facilities Development Program. In this capacity, he provides overall direction to a multi-disciplinary team for the development and restoration of outdoor recreation facilities throughout California. In addition to technical capabilities, Mr. Martinez's professional experience includes extensive involvement with public-process facilitation, user-conflict resolution, and agency consultation and coordination.

## Significant Projects

*Senior Program/Project Manager – Upper American River Project Recreation Facilities Improvement Program – Sierra Nevada, California*

Mr. Martinez is serving as senior project manager of a team of engineers and scientists for the planning, designing, and permitting the rehabilitation and/or construction of recreation facilities in the Crystal Basin Recreation Area in the Sierra Nevada mountains of California. These facilities include Sunset, Azalea, Northshore, West Point, and Ice House campgrounds, a section of the Union Valley Bike Trail, and the development of a roadway connecting various recreation facilities. Other facilities are scheduled for implementation in the near future. In addition, Mr. Martinez provides strategic support to the Sacramento Municipal Utilities District for Upper American River Project license implementation.

*Senior Program/Project Manager – Big Creek Alternative Licensing Process Recreation Facilities Major Rehabilitation Program – Sierra Nevada, California*

Mr. Martinez is program manager for the planning efforts, development of engineering plans, assessments of biological and cultural resources, development of NEPA and CEQA documentation, construction permitting, and implementation and completion of rehabilitation construction activities at eight U.S. Forest Service facilities: Rancheria, Dorabelle, College, Lower Billy Creek, and Upper Billy Creek campgrounds; as well as, Dorabelle, Dowville, Billy Creek, and Eastwood day-use picnic areas. The

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multidisciplinary program team includes engineers, terrestrial and aquatic biologists, NEPA/CEQA compliance specialists, and archaeologists.

*Project Manager/Technical Lead – Kennedy Meadows Enhanced Recreation Use Plan (ERUP) – Tuolumne County, California*

The ERUP addresses the social and physical considerations associated with the long-term support of the recreational experience at Kennedy Meadows to ensure the recreational experiences supported by this resource are preserved for current and future visitors to the area. In addition to resource and facility inventory and assessment efforts, a Visitor Need Assessment was conducted to evaluate user satisfaction, and identify current and future recreation needs. The ERUP provides a framework for making management decisions regarding recreation use levels, the development of recreation support facilities, and protection of environmental resources at Kennedy Meadows

*Technical Lead – Middle Fork America River Hydroelectric Project Relicensing – Central Sierra Nevada, California*

Mr. Martinez developed and initiated five recreational resource study plans for Placer County Water Agency (PCWA). These plans addressed recreation use in the Middle Fork American River Hydroelectric Project area. Studies implemented were the Streamflow and Opportunities, Reservoir Recreation Opportunities and Management, Recreation Use and Facilities Assessment, Recreation Surveys, and Visual Quality Assessment. For all studies, Mr. Martinez provided technical expertise, agency and organizational consultation, study protocol direction, coordination of field technicians, data analysis protocol and oversight, and preparation and review of final project technical reports.

*Technical Lead – Big Creek Hydroelectric Project Relicensing – Central Sierra Nevada, California*

Mr. Martinez developed and initiated 22 recreational resource study plans. The study plans addressed all facets of recreation use in the Big Creek Hydroelectric Project area. Examples of studies implemented include the Whitewater Recreation Assessment, Recreational Opportunities and Needs Assessment, Managed Spill Event Feasibility Study, Reservoir Recreation Water-Surface Elevation Study, and Compliance with Americans with Disabilities Act Assessment. For all studies, Mr. Martinez provided lead technical expertise, agency and organizational consultation, study protocol direction, direction of field technicians, and data analysis protocol and oversight.

# Rick Evans

## Current Position

Project Scientist

## Discipline Areas

- > Ecology
- > Wildlife & Fisheries
- > GIS
- > Habitat Analysis
- > Water Quality
- > Permit Compliance and Monitoring
- > Geomorphology
- > Impact Analysis

## Years' Experience

13

## Joined Cardno

2013

## Education

- > B.S., Environmental Science and Conservation Biology, CSU Sacramento, 2013

## State Permits

- > CDFW Scientific Collection Permit SC-200270004
- > CDFW Plant Voucher Permit 2081(a)-18-033-V

## Certifications

- > ESRI ArcGIS
- > Electrofishing
- > CPR/Wilderness First Aid
- > CA Boater Safety Card
- > ATV/UTV Safety
- > Chainsaw Operation
- > Dive Safety Officer
- > Swift Water Rescue
- > 40-Hr HAZWOPER

## Training

- > Rare Pond Species Workshop

## Summary of Experience

Mr. Evans is a terrestrial and aquatic scientist with broad experience in environmental consulting. He has many years of experience studying, handling, and managing for aquatic and terrestrial sensitive and CESA/ESA listed species (e.g., salmonids, northern goshawk, California spotted owl, great gray owl, burrowing owl, roosting bat, fisher, California red-legged frog, Sierra Nevada and foothill yellow-legged frog, western pond turtle (WPT), Yosemite toad). He has conducted fish population studies, benthic macroinvertebrate (BMI) sampling; hydrologic and geomorphology studies; water temperature and quality monitoring, botanical surveys (sensitive and invasive); invasive plant management. He is frequently involved with technical studies involving specialized equipment (helicopter operations, off-road vehicles) and heightened safety components (snorkeling, electrofishing, boat use, OHV use, helicopter operations, swift or deep water surveys). He has supported a multitude of project types including FERC relicensing and compliance, forest management, infrastructure, mitigation, compliance monitoring, stream/meadow restoration etc. He has prepared permit applications (401, 404, 1600), authored technical reports, monitoring plans, environmental clearances, biological reviews, impacts analyses, FERC relicensing documents and is proficient in GIS applications.

## Significant Projects

*Project Biologist – Placer County Water Agency (PCWA) FERC License Compliance Middle Fork American River Project – Foresthill, CA*

Mr. Evans is part of a team implementing various license compliance monitoring components for PCWA's MFP FERC Project. He is a technical lead for implementation of various foothill yellow-legged frog (FYLF) Monitoring plans as well as Western pond turtle monitoring. Other monitoring plans he is supporting as a senior biologist include aquatic invasive species surveys, fish population sampling, water temperature monitoring, geomorphology and water quality monitoring.

*Project Biologist – Coleman Valley Nevada CCS Sage Grouse Credit Analysis – Washoe County, NV*

As part of a team, conducted sagebrush and meadow habitat evaluations in a remote mountain range in Nevada to generate conservation credit estimates using the Sage Grouse Habitat Quantification Tool developed by the State of Nevada.

*Lead Project Biologist – The Nature Conservancy & Placer County Water Agency (PCWA) French Meadows Forest Management Project – Tahoe National Forest, CA*

Mr. Evans lead protocol-level surveys for northern goshawk and California spotted owl in the Tahoe National Forest, in partnership with the US Forest Service (USFS) and The Nature Conservancy, to analyze species presence, abundance, and reproductive status. He assisted with preparation of a Biological Evaluation for the forest treatment project.

*Lead Project Scientist / GIS Specialist – PG&E Kennedy Meadows Riparian Restoration and Streambank Stabilization Project- Tuolumne County, CA*

Mr. Evans supported the project, located in Tuolumne County, by leading the two-year protocol-level great gray owl study, conducting permit-required turbidity monitoring throughout the duration of project implementation, and providing GIS support for design, permitting, and reporting purposes. He also coordinated nursery plantings and on-site willow pole collections and implemented planting design, reporting, and restoration success

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- > FYLF Workshop
- > CNDDDB/ BIOS

## Affiliations

- > The Wildlife Society
- > American Fisheries Society

monitoring for the project. He is currently assisting with preparation of an IS/ND permit amendment and 401 permit for additional restoration planting for the Project.

### Lead Project Biologist/Construction Monitor –SCE South Lake Tunnel Intake Improvement Project – Bishop, CA

Mr. Evans acted as the Designated Biologist for the South Lake Tunnel Intake Improvement Project. Tasks included 401, 404, 1600 permit applications, worker environmental training, daily preconstruction and biological clearance surveys (SNYLF), agency consultation, dewatering design assistance, fish stranding surveys, salmonid rescues, and general project compliance monitoring. He was onsite through the duration of project activities and was an integral part of environmental compliance problem solving and project completion.

### *Project Biologist – Meeks Meadow (Mayala Wata) Restoration Project – Lake Tahoe Basin, CA*

Mr. Evans led protocol-level Sierra Nevada yellow-legged frog surveys to support restoration of Meeks Meadow in partnership with the USFS and the Washoe Tribe of NV and CA. He also assisted in delineating vegetation monitoring plots to be used as part of the post-implementation vegetation monitoring plan.

### Project Biologist – SCE Rush Creek Emergency Flooding Strategic Support– June Lake, CA

Mr. Evans collects ongoing streamflow data for hydrologic modeling in support of emergency release activities associated with SCE's Rush Creek Hydroelectric Project. He is also helping to develop flood mitigation plans for the Rush Creek Flood Mitigation Project.

### Project Biologist – Vail Resorts Management Co. Heavenly Ski Resort Water Quality Monitoring – South Lake Tahoe, CA

Mr. Evans assists with ongoing monitoring and collection of instream flow, water quality data, and BMI sampling in support of Heavenly Ski Resort operations in accordance with the Tahoe Regional Planning Agency (TRPA) and Lahontan Regional Water Quality Control Board (RWQCB) requirements. Conducts Surface Water Ambient Monitoring Program (SWAMP) bioassessment surveys to support the project.

### Lead Project Biologist/Construction Monitor – SCE Bishop Intake No. 4 Dam Spillway and Outlets Repair Project – Bishop, CA

Assisted with permit package application (401, 404, 1600), permit and water quality plan development, conducted daily turbidity monitoring and analysis, fish rescues and dewatering assistance, environmental training, permit compliance, consultation, and agency reporting for SCE's Bishop Intake No. 4 Dam Spillway and Outlets Repair Project.

### Project Biologist – Incline Village General Improvement District Diamond Peak Culvert Rehabilitation Project – Incline Village, NV

Mr. Evans performed Sierra Nevada yellow-legged frog habitat assessment and presence surveys on Incline Creek in support of two culvert rehabilitation projects to improve aquatic organism passage.

### Lead Project Biologist – PCWA Middle Fork American River Project (MFP) SNYLF ESA Surveys

Mr. Evans conducted multi-year protocol-level SNYLF surveys in concurrence with the USFWS Biological Assessment for PCWA's MFP in areas of suitable habitat adjacent to designated Critical Habitat throughout the project area.

# Erin Elliott

## Current Position

Senior Environmental Scientist

## Discipline Areas

- > Botany
- > Wildlife Biology
- > Wetlands Ecology
- > Biological and Wetlands Monitoring
- > Restoration
- > Recreation and Land Management

## Years' Experience

10

## Joined Cardno

2020

## Education

- > BS, Environmental Studies, Prescott College, 2011

## Trainings

- > Basic Wetland Delineation Training (04/15-04/16/2021)
- > Wetland Training Institute
- > SCE Stations Conditions Training (03/10/2021)
- > CPR / First Aid / AED Training and Certification (09/16/2020)
- > Assessment, Inventory, and Monitoring (AIM) Terrestrial Field Methods (02/27-03/02/2018)
- > Proper Functioning Condition Assessment for Integrated Riparian Management (07/25- 07/27/2017)

## Summary of Experience

Ms. Erin Elliott is a Senior Environmental Scientist with a background in natural resource management, botany, wildlife ecology, and recreation management. She has extensive experience completing regional protocol-level botanical and ecological inventories and field work, including rare plant and noxious weed surveys, small mammal surveys, nesting bird surveys, and wetlands jurisdictional delineations. She has managed restoration and habitat improvement projects, and has worked as a construction monitor, lead biologist, and water quality monitor for hydroelectric, transmission and distribution projects.

## Significant Projects

*Field Biologist – Southern California Edison (SCE) Environmental On-Call Program – Bishop, California*

Ms. Elliott conducts construction monitoring, pre-construction site sweeps, biological surveys, nesting bird and woodpecker surveys, water quality monitoring, wetland jurisdictional delineations, and fish rescues. She ensures that projects are completed in compliance with biological, wetlands, and archeological measures, as well as any California Department of Fish and Wildlife (CDFW), State Water Quality Control Boards (SWQCB), and United States Army Corps of Engineers (USACE) permits.

*Botanist – Rafter 7 Ranch Botanical Surveys & Yellow-Billed Cuckoo Habitat Mapping – Yerington, Nevada*

Ms. Elliott conducted botanical field surveys for special-status plants and noxious weeds at Rafter 7 Ranch within the Walker River State Recreation Area. These surveys contributed to the discovery and documentation of multiple occurrences for sagebrush cholla (*Grusonia pulchella*), as well as many noxious weed populations. She also served as the project botanist conducting habitat assessment and mapping for yellow-billed cuckoo at the Rafter 7 Ranch. In May 2021 Ms. Elliott acted as a lead Botanist conducting botanical surveys for special-status plants and noxious weeds on the El Dorado National Forest for PCWA.

*Botanist – Placer County Water Agency Middle Fork Project – Placerville, CA*

Ms. Elliott acted as a lead Botanist conducting botanical surveys for special-status plants and noxious weeds on the El Dorado National Forest for Placerville County Water Agency.

*Biologist – Southern California Edison (SCE) Environmental Compliance – California*

Ms. Elliott Conducts environmental reviews of SCE operations and maintenance projects throughout California and performs biological surveys. She completes biological and wetlands desktop analysis of transmission and distribution projects and provides QA/QC and guidance for team members. She prepares wetland permitting applications (404, 401, and 1602), as well as Jurisdictional Delineation and Habitat Assessment reports.

*Project Manager – Cuddeback and Pick High Fire Areas (HFAs) – SCE Environmental Compliance- California*

Ms. Elliott acted as the SCE Environmental HFA Lead for two covered conductor projects. She conducted requisite environmental trainings, hosted management calls, conducted

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- > Identification of Grasses (05/21- 05/22/2017)  
The University of Nevada Reno Herbarium
- > Botany Training (05/15-05/17/2017)  
The University of Nevada Reno Herbarium
- > Tortoise Handling Workshop (11/2011)  
Desert Tortoise Council

biological and wetlands desktop analysis, and arranged field surveys and scheduling in collaboration with SCE and construction project coordinators to ensure that work was completed in compliance with appropriate environmental measures, project permits, SWPPP, etc.

*Aquatic Resources Analyst – Calaveras County Water District Hunters Reservoir Raw Water Pump Station – Avery, California*

Ms. Elliott acted as a lead Botanist conducting botanical surveys for special-status plants and noxious weeds on the El Dorado National Forest for Placerville County Water Agency.

*Biological Specialist – Bi-State Sage Grouse - Great Basin Institute; Bureau of Land Management – Bishop Field Office, California*

Ms. Elliott supported a broad spectrum of projects within wildlife management, rangeland management, and recreation. She contributed to the design, implementation, monitoring, and completion of projects designed to enhance, rehabilitate, and restore Bi-State sage grouse habitat on BLM administered public lands with the Bishop Field Office. More specifically she was involved in the following projects and roles:

- > Assessing riparian areas for meadow restoration. Organizing and managing restoration and habitat improvement efforts in a variety of habitats. Working in correlation with USGS and USFWS to monitor and maintain habitat for special-status fish species.
- > Performing noxious weed and special-status plant surveys.
- > Assisting with the preparation for and implementation of pinyon-juniper treatments in the Bishop Field Office to improve and conserve Sage-grouse habitat. Performing pre-treatment special-status plant surveys. Evaluating BLM lands for potential future pinyon-juniper treatments.
- > Planning, preparing for, and leading habitat improvement volunteer events. Developing and producing public outreach flyers, social media posts, etc. relevant to work projects and events.
- > Coordinating Assessment Inventory and Monitoring project specifics with GBI Survey Crews to ensure BLM stipulations and specifications were met. Reviewing and assisting with the approval of AIM study design (plot locations, prioritization of field work, etc.). Reviewing AIM DIMA datasets and botanical species lists and performing site visits to help with data quality control and verification of species identification.
- > Carrying out seasonal road closure maintenance and maintaining livestock fencing. Installing fence markers within sage-grouse habitat to increase fence visibility and prevent sage-grouse collision mortalities.
- > Monitoring sage-grouse populations in the Bi-State and attending Bi-State sage-grouse Local Area Working Group meetings.
- > Performing Pygmy Rabbit surveys. Installing perch deterrents to avert predatory birds within sage grouse and pygmy rabbit habitat. Installing, maintaining, and monitoring wildlife cameras. Monitoring and maintaining wildlife drinking station structures.
- > Gathering native seed collections and the associated data compilations for future habitat restoration and range improvements. Performing noxious weed and sensitive plant surveys. Documenting and treating noxious weed infestations.
- > Working in correlation with USGS and “Trout Unlimited” on a Lahontan cutthroat trout habitat suitability project to install temperature data loggers along creeks in the northern Bishop Field Office. Data obtained from these temperature loggers will be used to characterize the thermal regime in streams.



# Matthew Tomaszewski

## Current Position

Environmental Scientist

## Discipline Areas

- > Plant Identification
- > Plant Ecology
- > Plant Ecophysiology
- > Fire Ecology
- > Climate Vulnerability
- > Animal Track and Sign
- > Remote Fieldwork
- > Soil Classification
- > ArcGIS and QGIS
- > R and SAS

## Years' Experience

1

## Joined Cardno

2022

## Education

- > MS, Natural Resource Sciences, Washington State University, 2022 (expected)
- > BS, Plant Sciences, Cornell University, 2019

## Certifications

- > Animal Track and Sign I Certification (Cyber Tracker)
- > Firefighter Type 2 (FFT2)

## Summary of Experience

Mr. Matthew Tomaszewski is a botanist and environmental scientist specializing in plant identification in the Eastern Sierra and Great Basin ecosystems. He is experienced with wilderness travel and fieldwork in remote areas. His fieldwork includes soil classifications, application of hydrological principles, forest inventories, and botanical surveys. His technical experience includes the use of light detection and ranging (LiDAR) data, such as point cloud and digital elevation models (DEMs), and applying ecophysiological models to qualify plant health. He is proficient in the use of ArcGIS and QGIS, Microsoft Excel, R, and SAS programming languages for data analysis. Mr. Tomaszewski's master's thesis elucidated how topography and hydrology influence drought stress in western redcedar and how trees at different microsites acclimate morphologically and physiologically to climate change.

## Significant Experience Completed Prior to Joining Cardno

*Botany Technician – US Forest Service – Inyo National Forest (INF), California (2020)*

Mr. Tomaszewski performed preconstruction botanical surveys for rare and invasive plants, conducted invasive weed control, and operated four-wheel drive vehicles on the Inyo NF roads for travel. He surveyed the deadman summit, June Lake and Mammoth Lakes areas for rare plants, and has a continued working knowledge of those plants. As one of two botanists on the Inyo NF, his work supported Southern California Edison pole line work, mitigation banking projects, and post-fire Burned Area Emergency Response surveys.

*Resource Assistant – US Forest Service – Inyo National Forest, California (2019)*

Mr. Tomaszewski independently maintained recreation sites spanning an area of 100 miles in the North Zone of the INF. He sold permits/passes and facilitated public engagement with recreation programs in the Mammoth Lakes Welcome Center. His work supported California off-highway vehicle grant-funded projects and was integral for preserving the visitor experience.

*Independent Research Scientist – Raguso Lab, Cornell University – New York (2019)*

Mr. Tomaszewski independently designed and carried out experiments on drought response and pollination biology in *Datura wrightii*. His analysis was summarized in a technical report that was used to supplement a doctoral student's dissertation.

*Research Assistant – Cornell Turfgrass Lab, Cornell University – New York (2017)*

Mr. Tomaszewski aided in the maintenance of 90+ research plots and daily upkeep of the research facility. He carried out data collection on all plots in accordance with protocol defined by lead researchers.

## Harlan Dewey, Jr.

### Current Position

Native American  
Cultural Resource  
Monitor

### Discipline Areas

- > Cultural Resource Surveys
- > Construction Monitoring
- > Data Collection

### Years' Experience

8

### Joined Cardno

2022

### Summary of Experience

Mr. Harlan Dewey, Jr. conducts construction monitoring on a range of projects in California and Nevada. His duties include close coordination with contractors, GPS data collection, documenting field notes, and conducting pedestrian surveys.

### Significant Projects

#### *Native American Monitor – Bishop Paiute Tribe – California and Nevada*

Mr. Dewey conducted construction monitoring on a range of projects in California and Nevada. Duties included taking providing trainings to contractors, coordinating with contractors, taking field notes, documenting finds, collecting GPS data, writing logs, and taking photographs. He also participated in pedestrian surveys.

Projects include:

- > Mammoth Lakes Community Recreation Center (2021) – construction monitoring
- > Mammoth Lakes Parcel Project (2021) – construction monitoring
- > Bishop Paiute Shoshone Tribal Lands (2020) – construction monitoring
- > Highway widening 395 South (2020) – survey and construction monitoring
- > Inyo/Mono County Garbage Dump Substation (2020) - survey and construction monitoring
- > Austin Nevada Grass Valley Ormat Technologies (2016) – construction monitoring
- > Southern California Edison Substation Chalfant Valley (2014) – construction monitoring

#### *Construction Contractor – Various – California and Nevada*

Mr. Dewey conducted underground and ground work involved with construction of a gas station and relocation of a sewer line and remodeled tribal homes in Death Valley, California.



## Nanette Hansel

PRINCIPAL/SENIOR PROJECT MANAGER

**YEARS OF EXPERIENCE** 28

### EDUCATION

BS, Environmental Policy Analysis and Planning (water quality emphasis), University of California, Davis, 1993

### AFFILIATIONS

California Association of Environmental Professionals (AEP)

Lake Tahoe Bicycle Coalition (LTBC), Treasurer (2014–present)

Parks and Recreation Commission, Douglas County, Nevada (2019–present)

### AWARDS AND HONORS

Placer County Tahoe Basin Area Plan and Tahoe City Lodge EIR/EIS (2017 Award for Outstanding Environmental Analysis Document from AEP)

### REPRESENTATIVE PROFESSIONAL WORKSHOPS/PRESENTATIONS

California Tahoe Conservancy CEQA Training, Instructor (November 4, 2015)

Ascent's Lake Tahoe Lunch & Learn monthly regulatory training series, Instructor and Series Coordinator (2021-present)

Nanette Hansel is a principal and senior project manager with 28 years of experience in environmental consulting. She is also the Office Director for Ascent's Lake Tahoe office. Her focus is on managing and preparing environmental review documents pursuant to CEQA, NEPA, and Tahoe Regional Planning Agency (TRPA) regulations for projects in Lake Tahoe, the Sierra Nevada, and a variety of other California and Nevada environments. Her diverse project experience includes projects involving forest health and wildfire risk reduction actions, habitat restoration, linear public facilities, energy infrastructure projects, solid waste and recycling facilities, and recreation improvements. Nanette led the environmental review team for some of Ascent's largest and most complex projects. She has also led the planning and implementation of robust public outreach supporting the environmental review process for a number of projects.

## PROJECT EXPERIENCE

### NV Energy Natural Disaster Prevention Plan Permitting and NEPA Documentation NV Energy

#### Project Manager

Under a Master Services Agreement, Ascent is providing planning and environmental review services to NV Energy that support implementation of its 2020 Natural Disaster Prevention Plan. Ascent is preparing the NEPA documentation, associated technical reports, and biological and cultural surveys on behalf of the US Forest Service, Lake Tahoe Basin Management Unit (LTBMU) and the Humboldt-Toiyabe National Forest (HTNF) for two Resilience Corridors Projects—one project located in the Tahoe Basin and surrounding areas and the other in the Spring Mountain National Recreation Area. The projects involve vegetation management within a 2,000-foot corridor surrounding powerlines intended to reduce the risk of catastrophic wildfire and improve forest health and resiliency. Treatments would include pole grubbing, forest thinning, removal of hazardous trees and forest biomass, prescribed burning, and defensible space protection zones. Ascent is also assisting NV Energy with planning and documentation for four HTNF master permits and permitting for its copper wire and pole replacement programs. Nanette is managing all aspects of the work and leads the LTBMU and HTNF interdisciplinary teams.

### Lake Tahoe West Landscape Restoration, Environmental Documentation and Regulatory Framework Recommendations Memorandum and EIR/EIS/EA

California Tahoe Conservancy/U.S. Forest Service, Lake Tahoe Basin Management Unit/Tahoe Regional Planning Agency

#### Project Manager

The Lake Tahoe West (LTW) Restoration Partnership is a collaborative effort led by the US Forest Service, California Tahoe Conservancy, California Department of Parks and Recreation, Tahoe Regional Planning Agency (TRPA), Tahoe Fire and Fuels Team, and National Forest Foundation. The effort involves the restoration of forest and watershed resiliency on approximately 60,000 acres of federal, state, local, and private lands on the west shore of the Lake Tahoe Basin. Ascent developed an environmental documentation and regulatory framework for the LTW Restoration Partnership. This task involved the development of recommendations for the most efficient environmental review and permitting processes for the LTW restoration partnership, which was determined to be the preparation of a joint CEQA EIR, TRPA EIS, and NEPA EA (EIR/EIS/EA).



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## Nanette Hansel

Ascent is contracted to prepare the EIR/EIS/EA. Nanette is leading the Ascent team on all aspects of the work.

### Liberty Utilities Resilience Corridors NEPA and Permitting Support and Other On-Call Environmental Services

Liberty Utilities

#### Project Director

Liberty Utilities is implementing several utility upgrade and wildfire mitigation projects to reduce the risk of catastrophic wildfire caused by failing equipment and to address hazardous fuels conditions. Nanette is directing the many projects for Liberty and has also assisted with biological resource surveys, CEQA Categorical Exemptions, and permitting for their projects. Specific assignments include:

- ▶ Resilience Corridors Project in the Lake Tahoe Basin
- ▶ Routine and Accelerated Vegetation Management Program
- ▶ Angora Ridge Wildfire Mitigation Project
- ▶ Tahoe Vista Rule 20 Undergrounding Project

Nanette also provides ongoing coordination with LTBMU resource specialists, TRPA, and other stakeholder agencies under Ascent's on-call environmental services contract.

### CAL FIRE State Minimum Fire Safe Regulations CEQA Documentation Support

California Board of Forestry and Fire Protection

#### Project Manager

The Board of Forestry and Fire Protection (Board) is proposing the adoption of updates to the State Minimum Fire Safe Regulations (Title 14 California Code of Regulations [CCR], Division 1.5, Chapter 7, Subchapter 2, Articles 1-5), as directed by SB 901 (Dodd, Statutes of 2018). Nanette is leading preparation of the documentation that substantiates the application of the common sense exemption and Class 7 and 8 categorical exemptions for compliance with CEQA and supporting the team in the development of the draft regulation updates. The overarching purpose of the proposed regulatory updates is to amend state minimum wildfire protection standards for new development, pursuant to SB 901. The updates also improve (1) access to building construction that provides for concurrent fire apparatus ingress and egress and civilian evacuation, and (2) unobstructed traffic circulation during a wildfire.

### Cabin Creek Biomass Facility Project EIR, Placer County

County of Placer

#### Project Manager

Nanette managed an EIR for Placer County's Cabin Creek Biomass Facility Project that withstood legal scrutiny from the Center for Biological Diversity. The proposed facility includes a 2-megawatt (MW) wood-to-energy plant that would produce electricity and heat, and produce indirect benefits related to fuels management and reduced potential for catastrophic wildfire. The facility would consist of an 80-foot by 80-foot two-story building and an open structure for biomass storage. The EIR assessed impacts of construction and operation of the facility, including land use, air quality, GHG emissions, noise, truck traffic, water supply and water quality, sustainable forest practices, and biological resources. Impacts to resources are analyzed at both the facility site and the areas from which biomass fuel would be obtained.

### CalPeco 625 and 650 Electrical Line Upgrade Project EIS/EIS/EIR, Tahoe Basin

U.S. Forest Service, Lake Tahoe Basin Management Unit/Tahoe Regional Planning Agency/California Public Utilities Commission

#### Senior Environmental Analyst

Ascent completed a joint EIS/EIS/EIR that evaluates the environmental effects of CalPeco's proposed upgrades to its North Lake Tahoe Transmission System loop. The transmission system loop is comprised of four electrical lines that extend between Truckee, Tahoe City, and Kings Beach. The project focused on an upgrade of two of these lines, CalPeco's existing 625 and 650 electrical lines and associated substations from 60 kilovolt (kV) to 120 kV. The project components are predominantly located on lands managed by the USFS in the Lake Tahoe Basin Management Unit (LTBMU) and Tahoe National Forest. Portions of the project are also located in the Town of Truckee as well as Kings Beach and Tahoe City, and on lands within the Martis Creek Lake Recreation Area (owned and operated by USACE, which was a cooperating agency under NEPA). Nanette led the coordination and selection of alternatives for evaluation in the EIR/EIS/EIS, the land use plan consistency review, and provided senior technical review of EIR/EIS/EIS resource sections.



## Sean Bechta

### SENIOR ENVIRONMENTAL PROJECT MANAGER

**YEARS OF EXPERIENCE** 30

#### EDUCATION

BS, Wildlife Biology, University of California, Davis

#### AFFILIATIONS

Association of Environmental Professionals

#### REPRESENTATIVE PROFESSIONAL WORKSHOPS/PRESENTATIONS

Aspects of CEQA Analysis in Highly Variable Human Environments, AEP State Conference – Presenter (2014)

AEP Spring Workshops – Advanced CEQA (2015, 2014, 2013)

AEP Regional Conferences – NEPA Basics (2015, 2014, 2013)

Sean Bechta is a senior environmental planner with 30 years of experience in CEQA, NEPA, and regulatory compliance. He has managed hundreds of compliance documents, permit applications, and technical reports for land use planning, natural resources, flood control, water infrastructure, telecommunications, energy, military, and development projects. Sean integrates knowledge of the impact review process, agency permitting, and the construction process to assist clients in implementing their objectives. He regularly collaborates with engineers, architects, and other members of the overall project team to address environmental issues during the design, permitting, and construction/implementation phases. Sean frequently provides training in CEQA, NEPA, and other environmental regulations.

### PROJECT EXPERIENCE

#### North Yuba Landscape Resilience Project EIS, Sierra County

South Yuba River Citizens League

##### Project Manager

Ascent is taking the lead role in preparing an EIS for the Forest Service for the North Yuba Landscape Resilience (NYLR) Project and completing the NEPA process, including public outreach elements. Ascent is also leading and coordinating the efforts of the Forest Service Inter-Disciplinary Team (IDT), including leading IDT meetings, reviewing technical reports, and developing approaches to NEPA impact assessment. The NYLR Project is a landscape-scale forest restoration project in the North Yuba River watershed within the Tahoe National Forest. The Proposed Action was developed through a collaborative process by the North Yuba Forest Partnership, a nine-member agency including the Forest Service, the South Yuba River Citizens League (SYRCL), and other stakeholders. The project will improve and restore forest health and resilience, reduce the risk of uncharacteristic wildfire, protect and secure water supplies, and protect communities from the effects of high-severity wildfire and climate change. Vegetation and fuels management treatments include prescribed fire, hand thinning, mechanical treatments, and creation of 1- to 3-acre openings. The planning area is approximately 275,000 acres, of which approximately 210,000 acres are National Forest System lands. The Proposed Action includes Forest Plan amendments to allow for more flexibility in forest health treatment approaches. The EIS is being prepared to support a staged decision-making approach. The entire proposed action is analyzed in the initial EIS; however, subsequent review and separate decision documents would be issued for future sub-projects within the project area prior to implementation of each sub-project. Key issues include endangered species, silviculture, wildfire risk reduction, and treatments in Inventoried Roadless Areas.

#### Squaw Valley | Alpine Meadows Base-to-Base Gondola Project EIS/EIR, Placer County

County of Placer

##### Project Manager

Ascent prepared an EIS/EIR for the proposed Squaw Valley-Alpine Meadows Base-to-Base Gondola Project. The project would include installation, operation, and maintenance of a winter operations-only gondola connecting the Squaw Valley and Alpine Meadows ski areas. Placer

# Attachment B

## Sean Bechta

County and USFS served as the CEQA and NEPA lead agencies, respectively, for this joint EIS/EIR. Key issues included impacts to scenic vistas, particularly as viewed from Squaw Valley Road (a County-designated scenic roadway), Alpine Meadows Road, Granite Chief Wilderness (GCW), and Five Lakes Trail; impacts to special-status plant and wildlife species and their habitats, including wetlands; avalanche risk; hydrology and water quality impacts; increased recreational use of adjacent USFS lands, including the GCW; and regional traffic impacts, including along SR 89. Sean managed preparation of the EIR/EIR. The EIR was certified in July 2019 and a Final Record of Decision (ROD) was issued in December 2019. Construction began in 2021 is anticipated to be completed in 2022. The resort formerly named Squaw Valley changed its name to Palisades Tahoe in September 2021.

### CalPeco 625 and 650 Electrical Line Upgrade Project EIS/EIS/EIR, Tahoe Basin

U.S. Forest Service, Lake Tahoe Basin Management Unit/Tahoe Regional Planning Agency/California Public Utilities Commission

#### Project Manager

Ascent prepared a joint EIS/EIS/EIR that evaluates the environmental effects of CalPeco's proposed upgrades to its North Lake Tahoe Transmission System loop. The transmission system loop comprised four electrical lines that extend between Truckee, Tahoe City, and Kings Beach. The proposed project focuses on an upgrade of two of these lines—CalPeco's existing 625 and 650 electrical lines—and associated substations from 60 kilovolt (kV) to 120 kV. The project components are predominantly located on lands managed by USFS in the Lake Tahoe Basin Management Unit and Tahoe National Forest. Portions of the project are also located in Truckee as well as in Kings Beach and Tahoe City, and on lands within the Martis Creek Lake Recreation Area (owned and operated by USACE, which was a cooperating agency under NEPA). Key issues included historic resources, biological resources, forestry resources, scenic resources, the construction and maintenance of vehicle pathways to allow ongoing access to the lines, the potential for recreation conflicts, and consistency with applicable land use plans and regulations.

### Yolo Habitat Conservation Plan/Natural Community Conservation Plan EIS/EIR, Yolo County

Yolo County Joint Powers Agency/U.S. Fish and Wildlife Service

#### Project Manager

Ascent assisted the Yolo County Joint Powers Agency (JPA) and USFWS in preparing an EIS/EIR for the Yolo Natural Heritage Program Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCCP) for Yolo County. This is a comprehensive, countywide plan designed to provide long-term conservation and management of natural communities, sensitive species, and the habitats upon which those species depend, while accommodating other important uses of the land. The plan serves as an HCP pursuant to the Endangered Species Act and as an NCCP under the California Natural Community Conservation Planning Act. The JPA is composed of members representing Yolo County: the Cities of Davis, West Sacramento, Winters, and Woodland; and the University of California at Davis (Local Partners).

### South Sacramento Habitat Conservation Plan EIS/EIR, Sacramento County

County of Sacramento

#### Project Manager

The South Sacramento Habitat Conservation Plan (SSHCP) and associated Aquatic Resources Plan (ARP) are intended to streamline Endangered Species Act and Clean Water Act permitting for developing portions of unincorporated Sacramento County and the cities of Rancho Cordova and Galt. The County of Sacramento and USFWS prepared the SSHCP to address conservation of 28 covered species and a diverse aquatic complex of vernal pools, streams, and rivers in the plan area. Ascent was a key member of the EIS/EIR preparation team, focusing on the environmental issues of federal interest (i.e., biology, wetlands, water resources, water quality, air quality, greenhouse gases, and environmental justice). The EIS/EIR evaluated the environmental impacts of all covered activities, including major land developments proposed in a defined urban development area, a regional highway connector, utility infrastructure, and conservation actions included in the SSHCP.



## Jessica Mitchell, AICP

### ENVIRONMENTAL PLANNER

**YEARS OF EXPERIENCE** 12

#### EDUCATION

BS, Environmental Policy Analysis & Planning, University of California, Davis, 2005

#### CERTIFICATION

American Institute of Certified Planners (No. 32528) [2020]

#### AFFILIATIONS

American Planning Association

#### WORKSHOPS/SPECIAL TRAINING

CLE CEQA Conference, 2017

AEP NEPA Basics Workshop, Sacramento, 2015

AEP CEQA Essentials Workshop, Sacramento, 2014

#### AWARDS

Lake Tahoe Shoreline Plan, AEP Outstanding Environmental Analysis Document

Placer County Tahoe Basin Area Plan and Tahoe City Lodge EIR/EIS, AEP Outstanding Environmental Analysis Document

Jessica Mitchell, AICP, is a skilled environmental planner with 12 years of experience preparing environmental compliance documents. Her responsibilities include helping manage and coordinate projects as well as writing, editing, and compiling the various sections of environmental documents. Jessica has contributed to the completion of environmental documents prepared for projects related to recreation planning, fire fuel management, regional planning, transportation, water supply, mining, residential development, recreation, and commercial and industrial specific plans, among others. She has technical experience in research and analysis related to resource topics such as agricultural and forestry resources, environmental justice, hazards and hazardous materials, land use, public services and utilities, and recreation. Her experience also includes preparation of joint documents for CEQA, NEPA, and TRPA compliance.

In addition to her environmental planning experience, Jessica spent 4 years teaching biology at the high school level. She spends much of her free time enjoying the outdoors near her home in Tahoe by hiking, running, snowboarding, and watching sunsets over the lake.

## PROJECT EXPERIENCE

### Mammoth Mountain Base Land Exchange Inyo, Plumas, and Stanislaus National Forests

US Forest Service/Mammoth Mountain Ski Area LLC

#### Environmental Planner

The US Forest Service is in the process of preparing environmental review documents in an effort to execute a land exchange with the Mammoth Mountain Ski Area (MMSA). The land exchange involves two Forest Service–owned land parcels at the base of the Mammoth Mountain Ski Area totaling approximately 30.6 acres, and 12 privately owned parcels totaling approximately 1,317.5 acres throughout the Inyo, Plumas, and Stanislaus National Forests. Ascent is subcontracted to prepare a biological evaluation/biological assessment (BE/BA) and a wetlands and floodplain assessment pursuant to Code of Federal Regulations Part 1022, Compliance with Floodplain and Wetland Environmental Review Requirements under Executive Order 11988, Floodplain Management, and Executive Order 11990, Wetlands Protection. Jessica participated in implementation of a trail camera survey for Mammoth Mountain Resort, in compliance with Forest Service guidance.

### Lake Tahoe West Restoration Partnership Environmental Review and Permitting Strategies, El Dorado and Placer Counties

California Tahoe Conservancy

#### Assistant Project Manager

Jessica scheduled and helped conduct interviews with staff from stakeholder agencies to obtain information about agency regulatory processes and requirements that could help streamline permitting and approvals that would allow an increase in the pace and scale of fire fuel management and habitat restoration actions in the forest along the west shore of Lake Tahoe. She also conducted research and compiled information about the potential permits and approvals that would be needed for activities related to the Lake Tahoe West strategy.

# Attachment B

Jessica Mitchell

## Meeks Bay Restoration Project

Tahoe Regional Planning Agency/USDA Forest Service/Lahontan Regional Water Quality Control Board

### Environmental Planner

The Meeks Bay Restoration and Public Access Project is a stream restoration and public recreation planning project at Meeks Bay on the west shore of Lake Tahoe. Restoration of Meeks Creek will provide substantial water quality and habitat benefits. However, restoration of the creek will require the removal of the Meeks Marina and the loss of public boating access. Key issues include emergency access and evacuation; weighing tradeoffs between motorized and non-motorized recreation access; and managing increased demand for parking, access, and camping. Alternative features include removal of the marina and restoration of the Meeks Creek lagoon, replacement of the SR 89 bridge, new bicycle and pedestrian paths, improved vehicle circulation and parking, a possible boat ramp, a small marina and pier, and reconfigured campgrounds. Ascent is preparing a joint EIS/EIS/EIR for TRPA, the Forest Service, and the Lahontan RWQCB to evaluate the potential environmental impacts of the project. Jessica prepared the recreation analysis and public safety analysis.

## Lake Tahoe Program Timberland EIR

Lake Valley Fire Protection District/California Department of Forestry and Fire Protection

### Assistant Project Manager

The Lake Tahoe PTEIR evaluates the effects of vegetation management actions across private, local, and state lands throughout the wildland-urban interface on the California side of the Lake Tahoe Basin, consistent with CEQA, the California Forest Practice Act, and California Forest Practice Rules. Covered activities include mechanical and hand thinning of forests, prescribed fire activities, and biomass extraction and utilization. Jessica helped prepare a resource data assessment memorandum to provide an overview of topics to be addressed in the PTEIR, a summary of available information, and information gaps where information necessary for the analysis was not readily available. She coordinated with the client and team members to prepare the PTEIR. She also completed the analysis for agricultural and forestry resources and recreation resource topics in the PTEIR and assisted in completion of the Final PTEIR.

## Sierra Nevada Conservancy Proposition 1 Grant Program CEQA Compliance, Multiple Counties

California Department of General Services/Sierra Nevada Conservancy

### Environmental Planner

Ascent coordinated with the Conservancy and legal counsel on CEQA` strategy for the Sierra Nevada Conservancy's Proposition 1 Grant Program and prepares exemptions and IS/MNDs as necessary to support the Conservancy's award of grant funding for selected projects. Jessica assisted in preparation of CEQA compliance documents for the program, which provides grant funding for watershed restoration and forest management projects throughout the Sierra Nevada.

## California Vegetation Treatment Program EIR

Board of Forestry and Fire Protection

### Environmental Planner

The Board proposes to initiate the Vegetation Treatment Program (VTP). The VTP is part of a comprehensive fire prevention strategy from the Board that is implemented by CAL FIRE. Under the VTP, CAL FIRE will implement strategic vegetation management activities as part of its mission to safeguard the people and protect the property and resources of California from the hazards associated with wildfire. Jessica prepared the land use and population analyses for the EIR.

## North Tahoe Interagency Forest Health and Biomass Reduction Project IS/MND, Placer County

California Tahoe Conservancy

### Assistant Project Manager

The North Tahoe Interagency Forest Health and Biomass Project involved preparation of an IS/MND for forest treatment activities at multiple sites and biomass processing and utilization in the Cabin Creek biomass energy generation facility. The project proposed treatment of approximately 273 acres of forest in a wildland-urban interface area in the Placer County portion of north Lake Tahoe, as well as transport and utilization of the generated biomass. The project area includes six separate treatment sites that would be treated by the California Tahoe Conservancy, California Department of Parks and Recreation, US Forest Service—Lake Tahoe Basin Management Unit, and North Tahoe Fire Protection District. Jessica helped coordinate preparation of the IS/MND, which included working with staff and project partners to develop the approach for the environmental document and data collection. She also conducted the environmental analysis for numerous resource sections of the IS/MND, including aesthetics, hazards, recreation, and transportation.





## Adam Lewandowski, AICP

PROGRAM MANAGER/TASK ORDER MANAGER

**YEARS OF EXPERIENCE** 20

### EDUCATION

MA, Environmental Planning,  
Prescott College

BA, Wildlands Ecology and  
Management, Sterling College

AA, Natural Resources Management,  
Sterling College

### CERTIFICATIONS

American Institute of Certified Planners  
(No. 28677)

### AFFILIATIONS

American Planning Association

Society of Outdoor Recreation  
Professionals

Peer reviewer for the journal *Biologic  
Conservation*

### AWARDS

Lake Tahoe Shoreline Plan, AEP  
Outstanding Environmental Analysis  
Document

Placer County Tahoe Basin Area Plan  
and Tahoe City Lodge EIR/EIS, AEP  
Outstanding Environmental Analysis  
Document

State Wildlife Action Plan 2015 Update,  
AEP Outstanding Environmental  
Resource Plan

Tahoe Regional Plan Update: Western  
Planning Association, NV APA, and NV  
Landscape Architects Assoc. Awards for  
Environmental Planning

### REPRESENTATIVE PUBLICATIONS AND PRESENTATIONS

Lewandowski A., and J. Hester. 2015.  
"Integrating Regional and Local  
Environmental Standards." *Nevada  
Planner*. Fall 2015: 8–9.

Lewandowski, A., R. F. Noss, and  
D. Parsons. 2010. "The Effectiveness of  
Surrogate Taxa in Representing  
Biodiversity." *Conservation Biology*.  
24: 1367–1377.

Adam is a senior project manager with 20 years of experience leading complex environmental, regulatory, and planning projects for public agencies. He is an expert in CEQA, NEPA, and California Forest Practice Act compliance, and a leader in developing approaches that provide legal defensibility, promote environmental protection, and accelerate the delivery of fuel reduction and wildfire resilience projects. He has overseen the successful completion of over 100 CEQA documents and technical studies for fuel reduction projects in California. His wildfire experience ranges from small fuel reduction projects with straightforward CEQA exemptions to complex statewide or regional efforts. Adam is experienced in managing on-call contracts that involve multiple interdisciplinary teams carrying out numerous concurrent projects.

## PROJECT EXPERIENCE

### California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

#### Senior Environmental Planner

The Board of Forestry and Fire Protection (Board) initiated a new statewide California Vegetation Treatment Program (CalVTP) to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. The Program EIR (PEIR) can be used to substantially streamline implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Treatment actions include fire breaks, fuel reduction through mechanical removal and controlled burns, and habitat restoration. Adam worked collaboratively with the Board and the environmental review team to develop the objectives for the CalVTP consistent with recent legislation, executive orders, and statewide wildfire strategies. He led the development and analysis of feasible alternatives to the CalVTP that could achieve the basic objectives while reducing potential environmental impacts. Adam also contributed to preparation of the Project Specific Analysis (PSA) checklist, which is used to evaluate each future vegetation management activity consistent with the CalVTP.

### Sierra Nevada Conservancy Forest Management Grant Program CEQA Compliance, Sierra Nevada

California Department of General Services/Sierra Nevada Conservancy

#### Project Manager

Since 2015, Adam has managed CEQA compliance for the Sierra Nevada Conservancy's grant programs, which provide funding for forest management projects throughout the Sierra Nevada. He evaluates grant proposals and develops CEQA compliance strategies in consultation with Conservancy staff and legal counsel. He then oversees preparation of a variety of CEQA documents as necessary to support the Conservancy's award of grant funding for selected projects. CEQA compliance strategies under this program range from preparation of Initial Studies/Mitigated Negative Declarations, a variety of CEQA exemptions, and use of California Forest Practice Act documents (e.g., Timber Harvest Plans) as CEQA equivalent documents. Adam has directed CEQA compliance for over 100 grant projects that each cover a few hundred to several thousand acres. The projects include a variety of vegetation management treatments,

# Attachment B

Adam Lewandowski, AICP

such as hand and mechanical thinning, pile and broadcast burning, revegetation of burned areas, control of invasive plants, herbicide application, and forest erosion control.

## Prather/Medusa Forest Resilience Project NEPA EA, Stanislaus National Forest

US Forest Service/National Fish and Wildlife Foundation

### Project Manager

The US Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across the 7,136-acre project area. The objectives of the project are to reduce future fire intensity and severity, enhance the general health of forested stands, and maintain and enhance wildlife habitat and mature forest ecosystem values. Treatment activities include mechanical thinning, salvage, biomass removal, prescribed burning, mastication, and hand thinning. Ascent prepared an EA under NEPA and associated Specialist Reports. Adam managed all aspects of the project, including developing an approach and strategy, creating treatment units and prescriptions, public scoping, overseeing preparation of specialist reports, managing preparation of the EA and Decision Memo, and responding to public comments.

## Sugar Loaf Mountain Fuel Reduction Project Notice of Exemption, Nevada County

Sierra Nevada Conservancy

### Project Manager

Adam managed preparation of a Notice of Exemption (NOE) for site improvements and restoration activities involving brush and small-diameter ladder fuels reduction on 31 acres of forestland. Ascent, in collaboration with the Sierra Nevada Conservancy, determined that the project was categorically exempt from the provisions of CEQA pursuant to CEQA Guidelines Section 15304, Class 4, which consists of minor public or private alterations in the condition of land, water, and/or vegetation. To support the exemption, Ascent provided substantial evidence to describe why the exceptions in CEQA Guidelines Section 15300.2 did not apply to the project.

## CEQA Compliance for the Tahoe-Central Sierra Landscape-Level Restoration Program

Sierra Nevada Conservancy

### Project Manager

Adam assisted the Sierra Nevada Conservancy with ensuring CEQA compliance for multiple forest management projects funded by the Greenhouse Gas Reduction Fund (GGRF). The projects are designed to increase carbon sequestration and reduce wildfire risk on three priority landscape management units within the Tahoe-Sierra macro-landscape area: the South Fork of the American River Watershed; the Lake Tahoe West Restoration Partnership (Lake Tahoe West); and the Tahoe Headwaters Treasured Landscape. These three landscapes cover a combined 1.1 million acres across federal, state, local, and private land that are state and local priorities for collaborative action due to the complex issues facing them, and values. Specific CEQA tasks that Ascent has completed under this program include:

- ▶ Caples Creek Watershed Restoration Project IS/ND (prescribed fire on 6,800 acres),
- ▶ Biggie Vegetation Management and Fuels Reduction Project IS/MND (thinning and prescribed fire on 3,549 acres),
- ▶ Tobacco Gulch Ecological Restoration Project IS/MND (thinning and prescribed fire on 2,791 acres),
- ▶ Upper North Yuba Forest Health and Resilience Project IS/MND (thinning of 267 acres), and
- ▶ Sagehen Forest Project (broadcast burning on 1,500 acres).

## Lake Tahoe Program Timberland EIR Preparation and Implementation, Placer and El Dorado Counties

Lake Valley Fire Protection District/CAL FIRE

### Project Manager

The Lake Tahoe Program Timberland EIR (PTEIR) evaluates the effects of vegetation management actions across private, local, and state lands throughout the wildland-urban interface on the California side of the Lake Tahoe Basin consistent with CEQA and the Forest Practice Act. Covered activities include mechanical and hand thinning of forests, prescribed fire activities, and biomass extraction and utilization. Adam first led a strategy development effort to identify the most efficient and effective approaches to conduct the programmatic environmental review, comply with CEQA and Forest Practice Act requirements, and streamline the approval and delivery of vegetation management projects. Following development of the environmental review strategy, he led a team that worked cooperatively with CAL FIRE, local fire protection districts, the California Tahoe Conservancy, and the US Forest Service Pacific Southwest Research Station to prepare a PTEIR that is legally defensible and streamlines subsequent project approvals through a tiered, checklist-based approach.



## Linda Leeman

### PRINCIPAL/NATURAL RESOURCES PRACTICE LEADER

#### YEARS OF EXPERIENCE 23

#### EDUCATION

MS, Natural Resources, Humboldt State University

BS, Wildlife and Fisheries Biology, University of California, Davis

#### PROFESSIONAL AFFILIATIONS

The Wildlife Society Executive Board Member, 2006–2014

Association of Environmental Professionals

Central Valley Bird Club

#### CERTIFICATIONS

Certified Wildlife Biologist by the Wildlife Society since February 2005

Professional Development Certificate by the Wildlife Society

#### AWARDS AND HONORS

EchoWater Project EIR, Sacramento Regional County Sanitation District (2016 Award for Outstanding Environmental Analysis Document from AEP)

State Wildlife Action Plan 2015 Update, AEP Outstanding Environmental Resource Plan

AEP National Environmental Excellence Award in the category of Environmental Stewardship, April 2013, San Joaquin River Restoration Program, EIR/EIS

#### PRESENTATIONS/PUBLICATIONS

"Major Environmental Regulations: Practical Knowledge for Biologists" Workshop at TWS-WS Annual Meeting, Reno, NV February 8, 2022.

"Climate Change at the Local Level: how climate adaptation can be incorporated into natural resources management decisions." Presentation at TWS-WS Annual Meeting, Pomona, CA February 25, 2016.

Linda Leeman is Ascent's Natural Resources Principal and Practice Leader with 23 years of professional experience. She specializes in habitat assessments, biological resources impact analyses, and endangered species permitting. Linda has extensive experience with CEQA, NEPA, and federal and California ESA compliance for projects throughout Northern California. She is adept at managing teams of technical specialists and providing senior review, quality assurance, and budgetary oversight. She regularly coordinates with local, state, and federal regulatory and resource management agencies, providing reliable, unbiased information to help inform regulatory decisions that allow her clients to achieve their objectives. Linda is a Certified Wildlife Biologist.

#### PROJECT EXPERIENCE

##### Tuolumne County/Stanislaus National Forest Master Stewardship Agreement for Forest Restoration Activities

County of Tuolumne

##### Principal-in-Charge

Ascent has an on-call contract with Tuolumne County to conduct botanical surveys in advance of forest restoration and fuel reduction activities on US Forest Service land. The County entered a Master Stewardship Agreement with the Stanislaus National Forest to conduct landscape restoration within the National Forest lands. Ascent botanists conducted field surveys in accordance with the Forest Service's 2014 Threatened, Endangered, and Sensitive (TES) Plants Survey Protocol and Field Guide (TES Plant Protocol) and mapped occurrences according to the Forest Service's 2015 Threatened, Endangered, and Sensitive Plants Element Occurrence Protocol and Field Guide (Element Occurrence Protocol). Linda oversees the on-call contract.

##### California Statewide Vegetation Treatment Program EIR, Statewide

Board of Forestry and Fire Protection

##### Principal Biologist

In response to the state's wildfire crisis, the Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection (CAL FIRE) developed the California Vegetation Treatment Program (CalVTP) to implement vegetation treatments to reduce wildfire risk and promote landscape resiliency within 20 million acres of the State Responsibility Area. The CalVTP will increase the pace and scale of vegetation treatment to a target of 250,000 acres per year pursuant to Executive Order B-52-19. Treatments include prescribed burning, manual and mechanical methods, herbicide application, and prescribed herbivory in various combinations to implement fuel breaks, wildland-urban interface treatments and ecological restoration in fire-adapted vegetation communities. Ascent led preparation of the Program EIR (PEIR), which is designed to streamline CEQA review of later vegetation treatment projects consistent with the CalVTP, including using "within the scope" findings according to CEQA Guidelines Section 15168 and speed project approval and implementation. Linda oversaw biological resources CEQA analysis for the PEIR.

# Attachment B

Linda Leeman

## Mountain High Resort, Mountain Bike Trails Project, Mountain High Resort, Angeles National Forest

Mountain High Resort (SE Group)

### Principal Biologist

Mountain High Resort (MHR) proposes to construct a 13-mile mountain bike trail network within MHR's existing Special Use Permit (SUP) area at MHR-West. The mountain bike trails would be built using sustainable trail construction techniques, employing hand crews and small machinery when necessary. The project is located within the San Gabriel Mountains in the Angeles National Forest, near the town of Wrightwood. In support of National Environmental Policy Act (NEPA) compliance, Ascent is conducting biological and archeological resource surveys and preparing specialist technical reports, including a Biological Assessment/Biological Evaluation, Invasive Weed Risk Assessment Report, Migratory Bird Report, and archeological resources investigation report. Site-specific project design criteria and resource protection measures will be developed and incorporated into the proposed action to minimize impacts to environmental resources. Linda is the principal-in-charge overseeing the field surveys and preparation of the specialist reports.

## Big Bear Mountain Resort, Master Development Plan, San Bernadino National Forest

Mountain High Resort (SE Group)

### Principal Biologist

The SE Group has prepared the 2020 Master Development Plan (MDP) for the Big Bear Mountain Resort. A key component of the MDP is expansion of the U.S. Forest Service Special Use Permit (SUP) boundary by approximately 300 acres to connect the Big Bear and Snow Summit SUP locations. In addition, seven new lifts (two new lifts at Bear Mountain, two new interconnect lifts, three new lifts at Snow Summit) and removal of eight lifts (two lifts from Bear Mountain and six lifts from Snow Summit) have been identified as part of the MDP. The MDP also includes installation of snowmaking infrastructure on approximately 77 acres and construction of a new on-mountain lodge at Bear Mountain. In support of National Environmental Policy Act (NEPA) compliance, Ascent is conducting biological and archeological resource surveys and preparing specialist technical reports, including a Biological Assessment/Biological Evaluation, Invasive Weed Risk Assessment Report, Migratory Bird Report, and archeological resources investigation report. Site-specific project design criteria and resource protection measures will be developed and incorporated into the proposed action to minimize impacts to environmental resources. Linda is the principal-in-charge overseeing the field surveys and preparation of the specialist reports.

## Los Padres National Forest Forest-Wide Invasive Plant Treatment Program, Monterey, San Luis Obispo, Santa Barbara, and Kern Counties

US Forest Service/National Fish and Wildlife Foundation

### Principal Biologist

The Los Padres National Forest, through its partnership with the National Fish and Wildlife Foundation, conducted an environmental analysis of a program to implement invasive and nonnative plant control throughout the National Forest to promote forest health, ecosystem restoration, wildfire recovery, and fire risk management. The Supervisor's Office determined an EA to be the level of review appropriate. Ascent provided management and NEPA services to guide the project through public review and completion. Linda provided senior guidance and review of the Biological Assessment.

## Alpine Meadows | Squaw Valley Base-to-Base Gondola, Placer County

County of Placer

### Senior Biologist

Ascent prepared an EIS/EIR for the proposed Squaw Valley-Alpine Meadows Base-to-Base Gondola Project. The project would include installation, operation, and maintenance of a winter operations-only gondola connecting the Squaw Valley and Alpine Meadows ski areas. The project would also include installation, operation, and maintenance of an avalanche control system near the Alpine Meadows portion of the gondola alignment. Placer County and the US Forest Service served as the CEQA and NEPA lead agencies, respectively, for this joint EIS/EIR. Key issues included impacts to scenic vistas, particularly as viewed from Squaw Valley Road (a County-designated scenic roadway), Alpine Meadows Road, Granite Chief Wilderness (GCW), and Five Lakes Trail; impacts to special-status plant and wildlife species and their habitats, including wetlands; avalanche risk; hydrology and water quality impacts; increased recreational use of adjacent Forest Service lands, including the GCW; and regional traffic impacts, including along SR 89. Linda oversaw initial biological studies and focused surveys for Sierra Nevada yellow-legged frog for the project. She also oversaw preparation of the Biological Assessment for the Forest Service to use for Section 7 consultation with USFWS.



## Steve Henderson

SENIOR BIOLOGIST

YEARS OF EXPERIENCE 22

### EDUCATION

MS, Biological Sciences (ecology and conservation biology emphasis), Montana State University, Bozeman, 1997

BS, Environmental Biology and Management (terrestrial ecology emphasis), University of California, Davis, 1993

### PROFESSIONAL AFFILIATIONS

The Western Section of the Wildlife Society

Peer-reviewed journal manuscripts for *The Condor* (Cooper Ornithological Society) and *Conservation Biology* (Society for Conservation Biology)

### SPECIALIZED TRAINING

Biological Assessment Preparation Workshop, U.S. Fish and Wildlife Service

Endangered Species Act Section 7 Consultation and Compliance workshop, Jones & Stokes

Habitat Conservation Planning (HCP) workshop, Jones & Stokes

California Environmental Quality Act (CEQA) workshop, Jones & Stokes

Southwestern Willow Flycatcher Protocol Survey Workshop, Southern Sierra Research Station

Wilderness First Aid Certification (current)

### REPRESENTATIVE PROFESSIONAL WORKSHOPS/PRESENTATIONS

Henderson, S. J., L. Kashiwase, and C. Alling. 2012. Osprey mitigation strategies to resolve conflicts with public projects. Presented at Tahoe Science Conference, Incline Village, NV. May 23.

Steve Henderson is a senior wildlife biologist with 22 years of professional experience. He specializes in natural resources planning and management, impact assessment and mitigation design, designing and conducting biological inventories and analyses, focused wildlife surveys and habitat suitability assessments, restoration and conservation planning, biological monitoring and adaptive management, applied ecological research and technical studies, and data analysis. Steve has extensive project experience in several regions of California and Nevada, including the Sierra Nevada and Cascade ranges, and Central Valley and foothill, North Coast, and Mojave and Colorado Desert regions. During the past 15 years, much of his technical work has focused on the Lake Tahoe Basin and Sierra Nevada. Steve coordinates frequently and maintains excellent professional relationships with resource management and regulatory staff in the Tahoe Basin and many national forests throughout the Sierra Nevada. He also participates in stakeholder meetings and outreach, and attends public hearings for projects. Steve works closely and coordinates with local, state, and federal regulatory and resource management agencies. Steve has managed and conducted protocol surveys and habitat assessments for several species, including willow flycatcher, northern goshawk, spotted owl, and community-level studies of landbird species using point count surveys and multivariate analysis techniques. He has also conducted surveys or habitat assessments for several other special-status species associated with forest, woodland, riparian, grassland, wetland, and desert habitats in California, including peregrine falcon, osprey, golden eagle, bald eagle, and other diurnal raptors; long-eared owl, flammulated owl, and other nocturnal owls; roosting bats; Pacific marten and other Forest Service Sensitive species. Steve has prepared documents for federal Endangered Species Act (ESA, Sections 7 and 10), California Endangered Species Act (CESA), CEQA, NEPA, and Tahoe Regional Planning Agency (TRPA) regulatory compliance, including Forest Service specialist reports, EIR and EIS sections, biological evaluations/biological assessments, environmental assessments, habitat conservation plans, and resource inventory reports.

## PROJECT EXPERIENCE

### Mammoth Mountain Base Land Exchange, NEPA Compliance, Inyo, Plumas, and Stanislaus National Forests

USFS/Mammoth Mountain Ski Area LLC

#### Senior Biologist

The US Forest Service (USFS) is in the process of preparing environmental review documents in effort to execute a land exchange with Mammoth Mountain Ski Area (MMSA). The land exchange involves two USFS-owned land parcels at the base of the Mammoth Mountain Ski Area totaling approximately 30.6 acres, and 12 privately owned parcels totaling approximately 1,317.5 acres throughout the Inyo, Plumas, and Stanislaus National Forests. Ascent is subcontracted to prepare a biological evaluation/biological assessment (BE/BA), and a wetlands and floodplain assessment pursuant to Code of Federal Regulations Part 1022, Compliance with Floodplain and Wetland Environmental Review Requirements under Executive Order 11988, Floodplain Management, and Executive Order 11990, Wetlands Protection. Ascent is also preparing environmental review for the EIS for all physical resources associated with the proposed land transfer.

### Biological Studies and NEPA Review for the NV Energy Resilience Corridors Project on the Humboldt-Toiyabe National Forest and the Lake Tahoe Basin Management Unit

NV Energy

#### Senior Wildlife Biologist

The U.S. Forest Service (USFS) and NV Energy have long partnered to manage vegetation threats along power line corridors in the National Forests. This proposed action would build on that partnership by improving forest health and wildlife habitat on lands adjacent to electrical infrastructure and reducing wildfire risk associated with that infrastructure operation. The proposed action involves treating vegetation on approximately 5,300 acres along power lines within the two National Forests – the Humboldt-Toiyabe National Forest and the Lake Tahoe Basin Management Unit – to reduce the risk of catastrophic wildfire on commercial, private, and public infrastructure; and improve wildlife habitat, promote tree growth, and improve timber stand resilience. In support of project permitting, Ascent is preparing a NEPA Decision Memo; resource protection measures (RPMs), including pre-implementation biological survey requirements; biological evaluation/biological assessment (BE/BA); invasive plant risk assessment; and migratory bird conservation report. Key species addressed in the biological analyses include flammulated owl, California spotted owl, northern goshawk, bald eagle, peregrine falcon, roosting bats (Townsend’s big-eared bat, pallid bat, and fringed myotis), Sierra Nevada yellow-legged frog and Lahontan cutthroat trout, and whitebark pine and other sensitive plant species. Steve is conducting the wildlife analyses and leading preparation of the BE/BA, RPMs, and migratory bird conservation report and coordinating with USFS specialists for the project.

### Prather-Medusa Forest Resilience Projects EA and Specialists Reports, Stanislaus National Forest

U.S. Forest Service/National Fish and Wildlife Foundation

#### Senior Biologist

The U.S. Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across the more than 7,000-acre project area. Ascent prepared an EA under NEPA and associated specialist reports. Steve led a field survey of the Prather-Medusa project area provided senior review for the biological assessment and biological evaluation, including reports for management indicator species and migratory birds, as well as for the biological resources section of the environmental assessment.

### California Vegetation Treatment Program EIR, Statewide

Board of Forestry and Fire Protection

#### Senior Wildlife Biologist

The Board proposed to initiate the Vegetation Treatment Program (VTP). The VTP is part of a comprehensive fire prevention strategy from the Board that is implemented by CAL FIRE. Under the VTP, CAL FIRE will implement strategic vegetation management activities as part of its mission to safeguard the people and protect the property and resources of California from the hazards associated with wildfire. Steve co- led the biological resources analysis and assisted with interagency coordination for the EIR.

### Quail Fuels and Vegetation Management Project – Biological Evaluation/Biological Assessment (BE/BA) and Environmental Assessment (EA), Lake Tahoe Basin Management Unit

U.S. Department of Agriculture, Forest Service–Lake Tahoe Basin Management Unit

#### Biologist

Evaluated biological effects of fuels treatments (e.g., prescribed burning, hand thinning) in forest stands along Lake Tahoe’s west shore, including the Blackwood Creek, Meeks Creek, and McKinney/Rubicon watersheds. Developed impact minimization and avoidance measures for biological resources. Prepared a BE/BA and biological resource sections of the EA. This project was implemented to achieve fuels management objectives established in the Sierra Nevada Forest Plan Amendment (SNFPA).

### Ward Creek Fuels and Vegetation Management Project – Environmental Assessment (EA), Lake Tahoe Basin Management Unit

U.S. Department of Agriculture, Forest Service–Lake Tahoe Basin Management Unit

#### Biologist

Evaluated direct, indirect, and cumulative biological effects of fuels treatments (e.g., prescribed burning, hand thinning) in forest stands in the Ward Creek watershed. Developed impact minimization and avoidance measures for biological resources, and prepared biological resource sections of the EA. This project was implemented to achieve fuels management objectives established in the Sierra Nevada Forest Plan Amendment (SNFPA).



## Emilie Zelazo

ENVIRONMENTAL PLANNER/CULTURAL RESOURCES  
SPECIALIST

**YEARS OF EXPERIENCE** 18

### EDUCATION

MA, Historic Preservation, Savannah College of Art and Design, 2015

MA, Anthropology, California State University, Sacramento, 2013

BA, Child Development, California State University, San Jose, 1992

### CERTIFICATIONS

Register of Professional Archaeologists

### PROFESSIONAL AFFILIATIONS

Society for California Archaeology

Great Basin Anthropological Association

California Indian Basketweaver Association

### PUBLICATIONS

Stevens, Michelle M. and Emilie M. Zelazo. 2015. Fire, Floodplains, and Fish: Historic Ecology of the Lower Cosumnes River Watershed. Edited by Pei-Lin Yu. In *Rivers, Fish, and the People*. University of Utah Press, Salt Lake City.

### PRESENTATIONS

Fire, Floodplains, and Fish: Traditional Resource Management and the Historic Ecology of the Lower Cosumnes River Watershed, CA, a presentation at the Ecological Society of American Annual Meeting (August 14, 2014).

Resource Intensification in California's Central Valley: Evidence for the Cosumnes River Valley, a presentation at the Society for California Archaeology Annual Meeting (March 30, 2012).

Emilie Zelazo has 18 years of environmental compliance and cultural resource management experience in California, Arizona, and the Great Basin. Her experience includes NEPA and CEQA document preparation, as well as cultural resources technical document preparation and oversight for CEQA, PRC 5024, and Section 106 compliance documents. She also has experience in monitoring, field and laboratory crew management, artifact cataloging, DPR-523 site record preparation, background research, information center record searches, Native American consultation, historical society consultation, historic artifact analysis, survey, excavation, and graphic productions. Emilie has field and reporting experience in the Central Valley, Sierra Nevada foothills, San Francisco Peninsula, Southern California, and the Great Basin, as well as in parts of Nevada and southwestern Arizona. She has worked in coordination with various government agencies including the National Park Service, Bureau of Land Management, US Forest Service, US Army Corps of Engineers, Federal Aviation Agency, Federal Highways Administration, US Department of the Army, and California Department of Transportation (Caltrans). Emilie meets the Secretary of the Interior's Standards for both archaeology and architectural history.

## PROJECT EXPERIENCE

### Meeks Bay Restoration Project, El Dorado County

Tahoe Regional Planning Agency

#### Archaeologist/Architectural Historian

Ascent is preparing an EIR/EIS/EIS and preparing a historic evaluation of the buildings and structures located at Meeks Bay on the western shore of Lake Tahoe in El Dorado County for the Meeks Bay Restoration Project. The historic evaluation will also assist the USDA Forest Service, Lake Tahoe Basin Management Unit (LTBMU) fulfill their obligations under the existing LTBMU Land Management Plan. Since the Meeks Bay Restoration Project is located on LTBMU lands, the evaluation requires not only compliance with both Section 106 of the National Historic Preservation Act and CEQA, it also must meet requirements outlined in the programmatic agreement (PA) developed among the USDA Forest Service, Pacific Southwest Region; the California State Historic Preservation Officer, the Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation (Region 5 PA). Emilie is assisting in the archival research, evaluations, Area of Potential Effect, and document preparation. Emilie is also providing peer review of the archaeological studies prepared for the project.

### Mammoth Main Lodge Base Redevelopment Project, Mono County

SE Group

#### Archaeologist/Architectural Historian

Ascent is preparing an EIR for the Mammoth Main Lodge Base Redevelopment Project located in the City of Mammoth Lakes, California. SE Group proposes to redevelop parcels located within the Main Lodge Base with hospitality and lodging products, multi-family and single-family for-sale residences, commercial services, skier service facilities, parking and associated infrastructure improvements including a realignment of a portion of Minaret Road. As proposed redevelopment will also require connected actions on lands owned and administrated by the Inyo National Forest

# Attachment B

## Emilie Zelazo

as well as engineering, right-of-way, and environmental approvals from the California Department of Transportation. Emilie is authoring the cultural resources assessment technical report and EIR sections in compliance with CEQA, AB 52, Section 106 of the National Historic Preservation Act, and the programmatic agreement developed among the USDA Forest Service, Pacific Southwest Region; the California State Historic Preservation Officer, the Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation (Region 5 PA). Emilie is directing and participating in the field survey, conducting the archival research, coordination with Inyo National Forest Heritage Management staff, and performing Native American and historic society consultation.

### Mountain High Resort, Mountain Bike Trails Project, Mountain High Resort, Angeles National Forest

Mountain High Resort (SE Group)

#### Archaeologist/Architectural Historian

Mountain High Resort (MHR) proposes to construct a 13-mile mountain bike trail network within MHR's existing Special Use Permit (SUP) area at MHR-West. The mountain bike trails would be built using sustainable trail construction techniques, employing hand crews and small machinery when necessary. The project is located within the San Gabriel Mountains in the Angeles National Forest, near the town of Wrightwood. In support of National Environmental Policy Act (NEPA) compliance, Ascent is conducting biological and archeological resource surveys and preparing specialist technical reports, including a Biological Assessment/Biological Evaluation, Invasive Weed Risk Assessment Report, Migratory Bird Report, and archeological resources investigation report. Site-specific project design criteria and resource protection measures will be developed and incorporated into the proposed action to minimize impacts to environmental resources. Emilie is lead archaeologist overseeing the field investigation and preparation of the report.

### Big Bear Mountain Resort, Master Development Plan, San Bernadino National Forest

Mountain High Resort (SE Group)

#### Archaeologist/Architectural Historian

The SE Group has prepared the 2020 Master Development Plan (MDP) for the Big Bear Mountain Resort. A key component of the MDP is expansion of the U.S. Forest Service Special Use Permit (SUP) boundary by approximately 300 acres to connect the Big Bear and Snow Summit SUP locations. In addition, seven new lifts (two new lifts at Bear Mountain, two new interconnect lifts, three new lifts at Snow Summit) and removal of eight lifts (two lifts from Bear Mountain and six lifts from Snow Summit) have been identified as part of the MDP. The MDP also includes installation of snowmaking infrastructure on approximately 77 acres and construction of a new on-mountain lodge at Bear Mountain. In support of National Environmental Policy Act (NEPA) compliance, Ascent is conducting biological and archeological resource surveys and preparing specialist technical reports, including a Biological Assessment/Biological Evaluation, Invasive Weed Risk Assessment Report, Migratory Bird Report, and archeological resources investigation report. Site-specific project design criteria and resource protection measures will be developed and incorporated into the proposed action to minimize impacts to environmental resources. Emilie is lead archaeologist overseeing the field investigation and preparation of the report.

### Meadow Farms ADA Improvements Project Historical Resources Evaluation Report, Archaeological Study Report, Finding of No Adverse Effect, and Historic Properties Survey Report, Inyo County

California Department of Transportation, District 9

#### Principal Investigator – Prehistoric Archaeology/Architectural Historian

Emilie provided review of and guidance for a consultant-prepared Historical Resources Evaluation Report that evaluated 16 built environment cultural resources for a pavement rehabilitation project with a complete streets and Americans with Disabilities Act (ADA) improvement element in Bishop. She also conducted the archaeological background investigation and Native American consultation and performed the archaeological survey and records searches. She authored the Archaeological Survey Report, Finding of No Adverse Effect document with Environmentally Sensitive Action Plan, and Historic Properties Survey Report for SHPO review and concurrence.

### Sonora Shoulders Widening Project Draft IS/MND-EA, Mono County, Humboldt-Toiyabe National Forest

California Department of Transportation, District 9

#### Environmental Planner/Architectural Historian

Emilie co-authored the draft IS/MND and EA for a highway shoulder widening project on US 395 in rural Mono County. This project involves realignment of Hot Creek and the acquisition of land from the Humboldt-Toiyabe National Forest (HTNF). Emilie conducted consultation with HTNF Forest Service staff in right-of-way and permitting regarding the project and its possible impacts to Forest Service resources. Emilie also performed the architectural history survey, documentation, and evaluation used for the cultural resources technical study in support of the project.





## Tammie Beyerl

### SENIOR BOTANIST AND WETLAND ECOLOGIST

#### YEARS OF EXPERIENCE 20

#### EDUCATION

MS, Plant Biology (Ecology), Southern Illinois University, Carbondale, 2001

BS, Plant Biology, Southern Illinois University, Carbondale, 1999

#### PROFESSIONAL AFFILIATIONS

Sacramento Valley Chapter, California Native Plant Society, Board Member (2021)

Northern California Botanists

#### AWARDS

AEP, Outstanding Environmental Analysis Document, 2021, Program EIR for the California Vegetation Treatment Program

AEP, Outstanding Environmental Analysis Document, 2016, EchoWater Project EIR

AEP, National Environmental Excellence Award in the category of Environmental Stewardship, April 2013, San Joaquin River Restoration Program EIR/EIS

#### SPECIALIZED TRAINING

NRCS California Tiger Salamander Workshop, Livermore (2010)

California Rapid Assessment Method Training, Sacramento (2008)

Basic Wetland Delineation Training, Houston (2004)

AEP CEQA Basics, Sacramento (2004)

Assessing Proper Functioning Condition of Lotic Riparian-Wetland Areas, Santa Rosa (2003)

Introduction to CEQA/NEPA for Botanists, Chico (2002)

#### SOFTWARE

GoogleEarth, CNDDDB RareFind, BIOS, CNPS Inventory of Rare and Endangered Plants, ArcGIS Field Maps, Wildnote

Tammie Beyerl is a senior botanist and wetland ecologist specializing in biological analyses for compliance with CEQA/NEPA, Clean Water Act, ESA/CESA, and California Fish and Game Code requirements. She is particularly skilled at preparing environmental compliance documents for large-scale projects with complex biological resource issues and has worked on numerous joint NEPA/CEQA documents and projects under multiple jurisdictions. Her expertise includes environmental review and impact analysis for fuels management projects and resource management plans, as well as residential and mixed-use development projects, public infrastructure improvements, and parks and recreational facilities. She prioritizes collaboration with ecologists, engineers, landscape designers, land use planners, and resource agencies to develop appropriate mitigation and design solutions. Tammie has 20 years of field practice in plant ecology and taxonomy in the Sacramento and San Joaquin Valleys, the Sierra Nevada, the Central and Southern Coast Ranges, and the Great Basin. She is experienced in leading, coordinating, and conducting biological resources investigations, including special-status plant surveys, invasive plant inventories and risk assessments, aquatic resource delineations, California Rapid Assessment Method (CRAM) for wetlands, habitat assessments, mitigation monitoring, and vegetation mapping and classification according to the Manual of California Vegetation and other classification and mapping standards. Tammie has designed and conducted ecological studies of invasive plant species, old-field succession, and wetland restoration; participated in assessment of riparian communities along flow augmented and bypass stream reaches in the Sierra Nevada; developed detailed mitigation and monitoring plans for federally listed plant species; and developed adaptive management plans for noxious weeds.

#### PROJECT EXPERIENCE

##### Mammoth Mountain Ski Area Woolly's Tube Park, Chair 16, Snowmaking Expansion, and Main Lodge Improvement Projects, Inyo National Forest, Mono County

SE Group

##### Senior Biologist

On behalf of Mammoth Mountain Ski Area (MMSA), Ascent assisted with biological surveys and evaluation to satisfy US Forest Service NEPA compliance for the Woolly's Tube Park, Chair 16 Replacement, and Snowmaking Expansion projects. MMSA is operated on Inyo National Forest Lands under a special-use permit. Ascent biologists gathered information on aquatic, botanical, and wildlife resources based on reconnaissance surveys and a review of existing information, evaluated the potential for the project to adversely affect special-status species, and recommended resource protection measures to minimize and avoid potential such effects. Ascent botanists conducted botanical surveys for ESA-listed, Forest Service Sensitive, and invasive plant species following Forest Service technical guidelines for data collection and reporting. Tammie provided guidance and oversight for field surveys and senior review of the baseline biological resources reports and prepared the Botanical Survey Report and Effects Analysis following the Inyo National Forest template. She coordinated with the Forest Service botanist throughout the process regarding survey approach, timing, and requirements to make sure Forest Service standards were met and the appropriate species were targeted. [2018–2021]

# Attachment B

## Tammie Beyerl

### Kyle Canyon Powerline Permit Renewal Project, Humboldt-Toiyabe National Forest

NV Energy

#### Lead Botanist

NV Energy provides electrical service throughout Nevada and to the community of Mt. Charleston, located in Kyle Canyon, approximately 35 miles west-northwest of Las Vegas on National Forest System land managed by the Humboldt-Toiyabe National Forest (HTNF), Spring Mountains National Recreation Area (SMNRA). Some existing authorizations on lands managed by the US Forest Service are expired and need to be renewed to bring permits into compliance with current terms and conditions and policy direction. NV Energy is requesting reauthorization of use of the right-of-way (ROW) to continue to operate and maintain existing power lines, including managing vegetation within the ROW to reduce the risk of wildfires from vegetation contacting utility infrastructure, and maintaining access to and within the power line ROW. Tammie was the lead botanist for the project. She participated in stakeholder meetings and developed strategies for conducting botanical resource surveys and led field surveys to map and document larval host and nectar plants for five sensitive butterfly species over a 649-acre survey area. Botanical surveys were conducted in accordance with the US Forest Service 2014 TES Plant Survey Protocol and Field Guide. Tammie led preparation of a biological resources survey report submitted to the Forest Service and prepared sensitive butterfly sections of the Forest Service Biological Evaluation for the project, as well as providing senior review for all botanical resource sections of the reports and quality assurance for data collection and management.

### Squaw Valley | Alpine Meadows Base-to-Base Gondola Project EIS/EIR, Placer County

County of Placer

#### Senior Botanist

Ascent prepared an EIS/EIR for the proposed Squaw Valley | Alpine Meadows Base-to-Base Gondola Project. The project would include installation, operation, and maintenance of a winter operations-only gondola connecting the Squaw Valley and Alpine Meadows ski areas. The project would also include installation, operation, and maintenance of an avalanche control system near the Alpine Meadows portion of the gondola alignment. Placer County and the US Forest Service served as the CEQA and NEPA lead agencies, respectively, for this joint EIS/EIR. Key issues included impacts to scenic vistas, particularly as viewed from Squaw Valley Road (a County-designated scenic roadway), Alpine Meadows Road, Granite Chief Wilderness (GCW), and Five Lakes Trail; impacts to special-status plant and wildlife species and their habitats, including wetlands; avalanche risk; hydrology and water quality impacts; increased recreational use of adjacent Forest Service lands, including the GCW; and regional traffic impacts, including along SR 89. Tammie reviewed baseline biological reports, including aquatic resources delineation and special-status plant survey reports, prepared the Biological Evaluation/Biological Assessment for Botanical Species according to the Tahoe National Forest template, and helped prepare the vegetation, botany, and wetlands sections of the EIS/EIR. Tasks included analyzing potential impacts on plant species listed as threatened or endangered under the Endangered Species Act and Forest Service Sensitive species, as well as wetlands and other sensitive habitats protected under NEPA and CEQA.

### California Vegetation Treatment Program Early Action Implementation

California Board of Forestry and Fire Protection

#### Senior Botanist/Vegetation Ecologist

The Board retained Ascent to support implementation of the California Vegetation Treatment Program (CalVTP) as part of Governor Newsom's 2021 early action funding package. Under this contract, Ascent is preparing Project-Specific Analyses (PSAs) for multiple project proponents to maximize CEQA streamlining and expedite delivery of wildfire risk reduction projects throughout California. Tammie is serving as a senior botanist/vegetation ecologist and has assisted the project team with training for natural resources group staff, scope and cost preparation, and development of strategies for maximizing efficiency of the PSA through consistency with the CalVTP and implementation of standard project requirements and mitigation measures related to botanical resources.

### Tuolumne County/Stanislaus National Forest Master Stewardship Agreement for Forest Restoration Activities

County of Tuolumne

#### Project Manager/Botany Team Leader

Ascent has an on-call contract with Tuolumne County to conduct botanical surveys in advance of forest restoration and fuel reduction activities on US Forest Service land. The County entered a Master Stewardship Agreement with the Stanislaus National Forest to conduct landscape restoration within the National Forest lands. Ascent botanists conducted field surveys in accordance with the Forest Service's 2014 Threatened, Endangered, and Sensitive (TES) Plants Survey Protocol and Field Guide (TES Plant Protocol) and mapped occurrences according to the Forest Service's 2015 Threatened, Endangered, and Sensitive Plants Element Occurrence Protocol and Field Guide (Element Occurrence Protocol). Tammie serves as project manager, responsible for maintaining project budgets and schedules, coordinating with project stakeholders, ensuring all survey areas were covered adequately, and ensuring data quality.



## Tiffany Lunday

TASK ORDER MANAGER

### YEARS OF EXPERIENCE

12

### EDUCATION

MPhil., Geography, University of Cambridge

BA, Geography, University of British Columbia

Tiffany Lunday is a seasoned NEPA manager with specifically analogous experience managing National Fish and Wildlife Foundation (NFWF) NEPA compliance contract projects. She specializes in natural resources management, forest management, and mining environmental review projects. Tiffany has prepared documents in support of CEQA, NEPA, and Tahoe Regional Planning Agency (TRPA) regulatory compliance, including water quality baseline reports, EIR and EIS sections, and EAs. She has also prepared permit applications for a variety of federal and state-level permits, including Water Pollution Control Permits, National Pollutant Discharge Elimination System permits, Section 404(b) permit applications, and state stormwater general permit applications.

### PROJECT EXPERIENCE

#### Mammoth Mountain Base Land Exchange NEPA Compliance, USFS/Mammoth Mountain Ski Area LLC

US Forest Service/Mammoth Mountain Ski Area LLC (SE Group)

##### Project Manager

The US Forest Service prepared environmental review documents in an effort to execute a land exchange with Mammoth Mountain Ski Area (MMSA). The land exchange involved two Forest Service–owned land parcels at the base of the Mammoth Mountain Ski Area totaling approximately 30.6 acres, and 12 privately owned parcels totaling approximately 1,317.5 acres throughout the Inyo, Plumas, and Stanislaus National Forests. Ascent was subcontracted to prepare a biological evaluation/biological assessment (BE/BA) and a wetlands and floodplain assessment pursuant to Code of Federal Regulations Part 1022, Compliance with Floodplain and Wetland Environmental Review Requirements under Executive Order 11988, Floodplain Management, and Executive Order 11990, Wetlands Protection. Ascent also prepared environmental review for the EIS for all physical resources associated with the proposed land transfer. Tiffany managed all efforts, including scope, schedule, and analysis, to complete the resource reports required by the Forest Service and to complete the EIS.

#### MMSA Snowmaking Expansion Biological Surveys, Mono County

Mammoth Mountain Ski Area LLC (SE Group)

##### Environmental Planner

Ascent is providing biological surveys and reporting for the Mammoth Mountain Snowmaking Expansion project and for botanical surveys and reporting for the Woolly's Tube Park project in support of a single Environmental Assessment for both projects.

#### Mammoth Chair 16 Replacement/Woolly's Tube Park, Mono County

SE Group

##### Project Manager

Ascent conducted a focused special-status plant survey of construction activity areas (including all vehicle travel routes) and lands within 50 feet of construction activity areas for the Chair 16 Replacement Project. The focused survey was conducted during a time that coincides with the

# Attachment B

Tiffany Lunday

blooming periods for the target species. The target species are defined as the 22 special-status plant species that were identified as having potential to occur on the project site based on the biological reconnaissance.

## Prather/Medusa Projects NEPA Compliance Support for Stanislaus National Forest

US Forest Service/National Fish and Wildlife Foundation

### Assistant Project Manager

The US Forest Service Stanislaus National Forest, Calaveras Ranger District proposed to conduct forest landscape resilience treatments across over 7,000 acres of National Forest System lands. The objectives of the project were to reduce future fire intensity and severity, enhance the general health of forested stands, and maintain and enhance wildlife habitat and mature forest ecosystem values. When implemented, treatment activities will include mechanical thinning, salvage, biomass removal, prescribed burning, mastication, and hand thinning. Ascent prepared an EA under NEPA and associated Specialist Reports. Tiffany prepared the EA and assisted in completion of the environmental review process alongside senior Ascent staff.

## Forest-Wide Invasive Plant Treatment Program NEPA EA, Los Padres National Forest

US Forest Service, Los Padres National Forest/National Fish and Wildlife Foundation

### Project Manager

Ascent prepared an EA to evaluate the environmental consequences of invasive plant treatments in the Los Padres National Forest. The Invasive Plant Treatment Program EA covered the entirety of National Forest System lands within the LPNF and evaluated a wide variety of treatment techniques that aim to be site-specific and conditions based. Adaptive management practices for application of treatment types were a central tenet of the approach to controlling invasive species under this program. Tiffany managed the environmental review under an EA, which involved multiple rounds of coordination among resource staff at the LPNF, oversight of Specialist Reports, and guidance and input regarding the proposed action.

## Sugar Loaf Mountain Fuel Reduction Project Notice of Exemption, Nevada County

Sierra Nevada Conservancy

### Environmental Planner

Ascent prepared a Notice of Exemption (NOE) for site improvements and restoration activities involving brush and small-diameter ladder fuels reduction on 31 acres of forest land. Ascent, in collaboration with the Sierra Nevada Conservancy, determined that the project was categorically exempt from the provisions of CEQA pursuant to CEQA Guidelines Section 15304, Class 4, which consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of mature, scenic trees except for forestry and agricultural purposes. As a part of the NOE, Ascent identified the exceptions from CEQA Guidelines Section 15300.2 and included a discussion of why each exception did not apply to the project. The discussion included an evaluation of the project location; cumulative impacts; and potential significant effects related to aesthetics, agriculture/forestry, air quality/greenhouse gas emissions, biological resources, cultural and historical resources, geology/soils, hazards/hazardous materials, hydrology/water quality, noise, transportation, land use, mineral resources, population and housing, public services, recreation, and utilities and service systems. Tiffany reviewed the CEQA categories of exemption and their applicability to the project and prepared the NOE on behalf of the Conservancy.

## Senate Bill 901 Exemption for the French Meadows Prescribed Fire Project, Tahoe National Forest

Sierra Nevada Conservancy

### Environmental Planner

Working closely with the Sierra Nevada Conservancy, Ascent prepared an NOE under CEQA for the French Meadows Prescribed Fire Project, pursuant to SB 901. Under SB 901, CEQA did not apply to prescribed fire, thinning, or fuel reduction projects undertaken on federal lands to reduce the risk of high-severity wildfire that have been reviewed under NEPA through the expiration of SB 901, if the primary role of a state or local agency was providing funding or staffing for those projects. For the French Meadows project, the Sierra Nevada Conservancy was providing funding to conduct prescribed burning activities on 700 acres of federal lands in the Tahoe National Forest to reduce wildfire risk. The actions to be undertaken by this project were reviewed in their entirety pursuant to NEPA through an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI). Accordingly, Ascent and the Sierra Nevada Conservancy determined that the project was statutorily exempt from CEQA and prepared the necessary documentation. Tiffany provided review for applicability of SB 901 to the project and prepared the NOE following review of the environmental analysis conducted under NEPA.



## Lisa Merry

### GIS SPECIALIST/RESOURCE ANALYST

#### YEARS OF EXPERIENCE 11

#### EDUCATION

MS, Environmental Science and Management, Conservation Planning Specialization, University of California, Santa Barbara, 2010

BS, Environmental Biology and Management, Minors in Geographic Information Systems (GIS) and Psychology, University of California, Davis, 2007

#### PROFESSIONAL AFFILIATIONS

URISA – The Association for GIS Professionals

Society for Conservation GIS

#### SOFTWARE CAPABILITIES

ArcGIS, GPS Trimble, MobileMapper, Google Earth, PC-ORD, CNDDDB, RareFind, BIOS, Adobe Design Suite, Miradi

#### AWARDS

State Wildlife Action Plan 2015 Update, AEP Outstanding Environmental Resource Plan

Midpeninsula Regional Open Space District Bear Creek Redwoods Preserve Plan and EIR (2017 Award for Outstanding Planning Document from AEP)

Plan Bay Area: Regional Transportation Plan/Sustainable Communities Strategies EIR (2018 Award of Merit for Environmental Analysis Document from AEP)

Lisa Merry is a GIS specialist and natural resources analyst. She has a graduate degree in environmental science and management and has 11 years of professional experience. Lisa possesses a strong educational background in GIS and database management. The focus of her graduate research was utilizing conceptual modeling and GIS in conservation planning and adaptive management. Her experience includes resource mapping and evaluation of wildlife habitats, botanical surveys, and watersheds for purposes of resources management planning and environmental impact analysis. Lisa manages the firm's GIS practice. She coordinates all GIS projects and the installation and configuration of all software that is GIS related, and is building and maintaining the GIS system. Prior to joining Ascent, she worked for the U.S. Forest Service Pacific Southwest Region performing data management for wildlife habitat and occurrence data on National Forest Lands throughout the region. Her skills include GPS field data recording, GIS resources analysis and mapping, natural resources assessments and management planning, and environmental impact assessment.

#### PROJECT EXPERIENCE

##### California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

##### GIS Specialist

The Board initiated a new statewide California Vegetation Treatment Program (CalVTP) to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. The Program EIR will substantially streamline implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Treatment actions include fire breaks, fuel reduction through mechanical removal and controlled burns, and habitat restoration. Other VTP goals include control of unwanted vegetation, including invasive species, improvement of rangeland for livestock grazing, improvement of fish and wildlife habitat, enhancement and protection of riparian areas and wetlands, and improvement of water quality in priority watersheds. Ascent was the prime consultant for EIR preparation. Lisa managed the GIS data, performed spatial analysis, and prepared maps for the project.

##### Yuba Foothills Healthy Forests Project, Yuba County

Yuba Water Agency

##### Wildlife Biologist

Ascent assisted the Yuba Water Agency with the preparation of CEQA documentation for the Yuba Foothills Healthy Forest Project. In February 2020, CAL FIRE awarded Yuba County a Forest Health Grant to conduct extensive forest management across 5,375 acres in various areas near Dobbins, Challenge, and Brownsville, utilizing fuel reduction, prescribed fire, pest management, reforestation, and biomass utilization. The project will provide benefits to forest health and vigor, climate change resilience, species composition, stabilized carbon and sediment, catastrophic fire risk reduction, improved water yield, and direct support for hydro and bio-energy fuels and local jobs. Lisa managed the GIS data, performed spatial analysis, and prepared maps for the project.

# Attachment B

Lisa Merry

## Routine and Accelerated Vegetation Management Program, El Dorado and Placer Counties

Liberty Utilities

### GIS Specialist

Utilities is facing pressure from CPUC, CAL FIRE, and others to address hazardous vegetation above and adjacent to their overhead electric facilities in order to minimize fire danger and power outages. Liberty Utilities is mandated to conform to rules and regulations as adopted by CPUC as well as to comply with all applicable federal, state, and local environmental laws. In the past, Liberty relied on USFS to perform the research and the surveys necessary to comply with environmental laws; however, due to the extreme wildfire risk, Ascent is performing the research and surveys necessary to comply with environmental laws. Lisa is providing GIS and mapping support for the project.

## CalPeco 625 and 650 Electrical Line Upgrade Project EIS/EIS/EIR, Tahoe Basin

U.S. Forest Service, Lake Tahoe Basin Management Unit/Tahoe Regional Planning Agency/ California Public Utilities Commission

### GIS Specialist

Ascent prepared a joint EIS/EIS/EIR evaluating the environmental effects of CalPeco's proposed upgrades to its North Lake Tahoe Transmission System loop. The transmission system loop comprised four electrical lines that extend between Truckee, Tahoe City, and Kings Beach. The project components are predominantly located on lands managed by USFS in the LTBMU and Tahoe National Forest. Portions of the project are also located in Truckee, Kings Beach, and Tahoe City and on lands within the Martis Creek Lake Recreation Area. Key issues included historic resources, biological resources, scenic resources, the potential for recreation conflicts, and plan consistency. Lisa managed the spatial data, digitized vegetation, and performed GIS analysis to calculate resource impacts from the four alternatives for the approximately 1,900-acre project area.

## Squaw Valley-Alpine Meadows Base-to-Base Gondola Project EIS/EIR, Placer County

County of Placer

### GIS Specialist

Ascent prepared an EIS/EIR for the proposed Squaw Valley-Alpine Meadows Base-to-Base Gondola Project. The project would include installation, operation, and maintenance of a winter-operations-only gondola connecting the Squaw Valley and Alpine Meadows ski areas. The project would also include installation, operation, and maintenance of an avalanche control system near the Alpine Meadows portion of the gondola alignment. Placer County and USFS were the CEQA and NEPA lead agencies, respectively, for this joint EIS/EIR. Key issues included impacts to scenic vistas, particularly as viewed from Squaw Valley Road (a County-designated scenic roadway), Alpine Meadows Road, Granite Chief Wilderness (GCW), and Five Lakes Trail; impacts to special-status plant and wildlife species and their habitats, including wetlands; avalanche risk; hydrology and water quality impacts; increased recreational use of adjacent USFS lands, including the GCW; and regional traffic impacts, including along SR 89. Lisa managed the spatial data, digitized vegetation, and performed GIS analysis to calculate resource impacts for the project area.

## Iowa Hill/Gerle Meadow Land Exchange

Sacramento Municipal Utility District

### GIS Specialist

As part of the 2008 Hydropower License for the Upper American River Hydroelectric Projects Nos. 2101-084 and 2155-024 (FERC Project No. 2101-084), there was a separately authorized Iowa Hill Pumped-Storage Project, part of which occurs in the Eldorado National Forest. In order to consolidate ownership in this area under SMUD, the Eldorado National Forest proposed a land exchange involving approximately 428 acres of National Forest lands for approximately 346 acres of SMUD-owned lands. Lisa provided GIS and mapping support for the project.

## Caples Creek Watershed Restoration Project Initial Study/Negative Declaration

El Dorado Irrigation District/Sierra Nevada Conservancy

### GIS Specialist

Ascent prepared an IS/ND for the Caples Creek Watershed Restoration Project, which is being implemented by the El Dorado Irrigation District, U.S. Forest Service, and Sierra Nevada Conservancy. The project involves prescribed fire activities on approximately 6,800 acres, including aerial ignition and understory burning, as well as meadow restoration and aspen enhancement activities on approximately 25 acres. The project is intended to reduce wildfire risk and protect municipal water sources. Lisa managed the GIS data, performed spatial analysis, and prepared maps for the project.



## Phi Ngo

### GIS SPECIALIST

YEARS OF EXPERIENCE 14

#### EDUCATION

BA, Communications with a minor in GIS, University of California, Davis

Phi Ngo is a GIS specialist with 14 years of experience in the environmental consulting field. He has many years of experience with cartographic mapping for various documents. He manages GIS databases for projects by obtaining data from various sources and maintaining the information for the project team. Along with data management, he also uses the data to perform geospatial analysis to help team members make informed decisions. His skills include ArcPad, SurvCE, Collector for ArcGIS, Survey123 for ArcGIS, ArcGIS Desktop, ArcGIS Pro, Adobe Illustrator, and AutoCAD.

### PROJECT EXPERIENCE

#### Tuolumne County/Stanislaus National Forest Master Stewardship Agreement for Forest Restoration Activities

County of Tuolumne

##### GIS Specialist

Ascent has an on-call contract with Tuolumne County to conduct botanical surveys in advance of forest restoration and fuel reduction activities on US Forest Service land. The County entered a Master Stewardship Agreement with the Stanislaus National Forest to conduct landscape restoration within the National Forest lands. Ascent botanists conducted field surveys in accordance with the Forest Service's 2014 Threatened, Endangered, and Sensitive (TES) Plants Survey Protocol and Field Guide (TES Plant Protocol) and mapped occurrences according to the Forest Service's 2015 Threatened, Endangered, and Sensitive Plants Element Occurrence Protocol and Field Guide (Element Occurrence Protocol). Phi set up the Esri Field Map for GPS data collection for the multiple botanist teams. He also post-processed the field GPS data which includes QA/QC and ensuring seamless GPS data integration with US Forest Service master database.

#### Kyle Canyon Powerline Permit Renewal Project

NV Energy

##### GIS Specialist

NV Energy provides electrical service throughout Nevada and to the community of Mt. Charleston, located in Kyle Canyon, approximately 35 miles west-northwest of Las Vegas on National Forest System land managed by the Humboldt-Toiyabe National Forest (HTNF), Spring Mountains National Recreation Area (SMNRA). Some existing authorizations on lands managed by the US Forest Service are expired and need to be renewed to bring permits into compliance with current terms and conditions and policy direction. NV Energy is requesting reauthorization of use of the right-of-way (ROW) to continue to operate and maintain existing power lines, including managing vegetation within the ROW to reduce the risk of wildfires from vegetation contacting utility infrastructure, and maintaining access to and within the power line ROW. Phi produced the cartographic figures for various botanical and biological reports. He also deployed GPS Units real-time data collection of various surveys. He also post-processed the field GPS data which includes QA/QC and ensuring seamless GPS data integration with US Forest Service master database.

# Attachment B

## Phi Ngo

### Biological Studies and NEPA Review for the NV Energy Resilience Corridors Project on the Humboldt-Toiyabe National Forest and the Lake Tahoe Basin Management Unit; Douglas County, Washoe County, and Carson City, Nevada

NV Energy

#### GIS Specialist

The U.S. Forest Service (USFS) and NV Energy have long partnered to manage vegetation threats along power line corridors in the National Forests. This proposed action would build on that partnership by improving forest health and wildlife habitat on lands adjacent to electrical infrastructure and reducing wildfire risk associated with that infrastructure operation. The proposed action involves treating vegetation on approximately 5,300 acres along power lines within the two National Forests – the Humboldt-Toiyabe National Forest and the Lake Tahoe Basin Management Unit – to reduce the risk of catastrophic wildfire on commercial, private, and public infrastructure; and improve wildlife habitat, promote tree growth, and improve timber stand resilience. In support of project permitting, Ascent is preparing a NEPA Decision Memo; resource protection measures (RPMs), including pre-implementation biological survey requirements; biological evaluation/biological assessment (BE/BA); invasive plant risk assessment; and migratory bird conservation report. Key species addressed in the biological analyses include flammulated owl, California spotted owl, northern goshawk, bald eagle, peregrine falcon, roosting bats (Townsend’s big-eared bat, pallid bat, and fringed myotis), Sierra Nevada yellow-legged frog and Lahontan cutthroat trout, and whitebark pine and other sensitive plant species. Phi produced the multiple cartographic figures for various reports and conducted multiple geospatial analyses.

### Auburn State Recreation Area General Plan and Resource Management Plan and EIR/EIS, Placer and El Dorado Counties

California State Parks Services

#### GIS Specialist

Ascent assisted California State Parks with preparation of a joint General Plan/Resource Management Plan and EIR/EIS for the approximately 30,000-acre Auburn State Recreation Area that meets the requirements of both California State Parks and Reclamation and included extensive public and agency engagement. Key issues include recreation-generated traffic, wildfire risk reduction and emergency access, river recreation management, conflicts between recreation and adjacent property owners, cultural resource protection and interpretation, and management of increasing demand for recreation access. Phi was responsible for alternative recreational opportunities and potential resources mapping. Along with visually communicating the different alternatives per land use types.

### Great Redwood Trail Feasibility Assessment Report, Sonoma County to Humboldt County

California State Parks Services

#### GIS Specialist

The Great Redwood Trail (GRT) is a proposed 300+ mile rail with trail and rail-to-trail project extending from Healdsburg in Sonoma County north to Korb in Humboldt County, and around the Humboldt Bay. Ascent led preparation of a Feasibility Assessment Report for the GRT by conducting research to identify constraints and preparing sections of the report, coordinating directly with internal staff and subconsultants, reviewing and providing feedback on work products, and participating in meetings with the client and other stakeholders. The Final Feasibility Report was completed in the November 2020. Phi assisted with data collection and management between the lead agency and various team members. He also led the team effort of the mapbook depicting the full alignment showing the constraints and access points of the trail.

### Castle Crags State Park Root Creek Drainage Forest Management Plan and Public Safety Improvement Project IS/MND, Shasta County

California State Parks Services

#### GIS Specialist

Ascent assisted Castle Crags State Park with developing a Forest Management Plan to guide future fire risk reduction and habitat management of the forest within the Root Creek Drainage, including prescription burning, ongoing vegetation management, and a new emergency access route. Phi helped with the cartographic figures of the project and maintaining the database for the wetland delineation.





## Zachary Miller, AICP

### TRANSPORTATION AND ENVIRONMENTAL PLANNER

**YEARS OF EXPERIENCE** 13

#### EDUCATION

MS, City and Regional Planning,  
Environmental Planning Emphasis,  
California Polytechnic State University,  
San Luis Obispo, 2010

MS, Engineering, Transportation  
Planning, California Polytechnic State  
University, San Luis Obispo, 2010

BA, Urban Studies and Planning,  
University of California, San Diego, 2006

#### CERTIFICATIONS

American Institute of Certified Planners  
(No. 025880)

#### PROFESSIONAL AFFILIATIONS

American Planning Association (APA)  
member

#### SOFTWARE CAPABILITIES

ArcGIS, Adobe Design Suite, AutoCAD,  
Synchro

Zachary Miller, AICP, is a noise specialist and transportation planner with 13 years of experience in planning and environmental impact analysis as well as in transportation planning, long-range planning, land use planning, and environmental impact analysis. He has worked on a variety of CEQA and NEPA environmental documents, including environmental impact reports, initial studies, and technical studies and has evaluated a range of noise impact issues, including the potential for residents to experience sleep disturbance or noticeable ground vibration levels from noise and vibration generated by nearby freeways/roadways, light-rail lines, mechanical equipment, and construction activity. His technical experience includes application of the Federal Highway Administration's Roadway Construction Noise Model and Traffic Noise Model and the collection of sound level measurements in the field in accordance with American National Standards Institute standards. He has a high degree of familiarity with various types of construction equipment and the noise generated by that equipment. Zachary has worked on transportation projects throughout the state ranging from small-scale traffic studies to multibillion-dollar public transportation infrastructure and transit projects. He has reviewed and commented on transportation sections prepared for CEQA environmental documents by transportation subconsultants. He specializes in working with transportation planning and traffic engineering consultants to ensure their technical analysis will adequately support a CEQA section.

### PROJECT EXPERIENCE

#### California Vegetation Treatment Program PEIR, Statewide

California Board of Forestry and Fire Protection

##### Transportation Planner

The Board initiated a new statewide California Vegetation Treatment Program (CalVTP) to support fire fuel treatment of 250,000 acres per year in the State Responsibility Area in response to the growing wildfire crisis. The Program EIR substantially streamlines implementation of later activities consistent with CalVTP strategies for fire fuel reduction, fuel break development, and ecosystem restoration. Treatment actions include fire breaks, fuel reduction through mechanical removal and controlled burns, and habitat restoration. Other VTP goals include control of unwanted vegetation, including invasive species, improvement of rangeland for livestock grazing, improvement of fish and wildlife habitat, enhancement and protection of riparian areas and wetlands, and improvement of water quality in priority watersheds. Zachary served as the project transportation analyst for the CEQA review of the project and developed the transportation analysis methodology. Additionally, he analyzed the significant environmental effects related to transportation associated with implementation of the CalVTP.

#### Resilience Center Project IS/MNDs and EAs, Tuolumne County

County of Tuolumne

##### Transportation Planner

Tuolumne County received a National Disaster Resilience Competition grant as part of HUD's Community Development Block Grant Disaster Recovery to construct and operate two community resilience centers in the communities of Tuolumne and Groveland. Ascent prepared two IS/MNDs and two EAs to evaluate the environmental effects of the proposed centers, which

# Attachment B

## Zachary Miller, AICP

would be designed to function during both non-emergency and emergency times. During non-emergency operation, the centers would be used for meetings, parties/fundraisers, training, banquet/receptions, and limited governmental activities (e.g., public voting, job search assistance). During emergencies, the centers would function as shelters, providing sleep space and food for first responders, gathering space for emergency responders to conduct briefings, a place for public use of computers for communication purposes, staging areas for animal evaluations, and cooling/heating for the public during extreme weather days. Zachary managed the transportation and circulation components of the project and analyzed the significant environmental effects related to transportation associated with implementation of the centers.

### Miller/Knox Regional Shoreline Land Use Plan Amendment Program EIR, Contra Costa County

East Bay Regional Park District

#### Associate Transportation Planner

Zachary was the project transportation analyst for the CEQA review of the Miller/Knox Regional Shoreline Land Use Plan Amendment (LUPA). Miller/Knox is a shoreline park in the community of Point Richmond. The LUPA is intended to enhance the park's recreational, interpretive, biological, historic, and scenic values and fully incorporate and interconnect the trails and paths throughout the park and with the Bay Trail. Zachary served as the project transportation analyst for the CEQA review of the project and developed the transportation analysis methodology. Additionally, he analyzed the significant environmental effects related to transportation associated with implementation of the LUPA.

### US 50/South Shore Community Revitalization Project EIR/EIS/EIS, Lake Tahoe Basin

Tahoe Transportation District/Federal Highway Administration/Tahoe Regional Planning Agency

#### Associate Transportation Planner

Ascent worked with TTD, FHWA, and TRPA to prepare a joint EIR/EIS/EIS for the proposed US 50/South Shore Community Revitalization Project. The project area extends between Pioneer Trail in South Lake Tahoe and State Route 207 in Stateline. The primary goals of the proposed project were to relieve traffic congestion by diverting through traffic around the casino corridor while encouraging pedestrian traffic. Other goals included improving pedestrian, bicycle, and public safety, transit services, circulation, and community design, while incorporating identified water quality improvements in the US 50/Stateline Corridor and reducing region-wide vehicle miles traveled (VMT). Zachary reviewed and commented on the technical study prepared for the environmental document by the transportation subconsultant and worked with them to ensure that the technical analysis provided all the necessary information to adequately support the environmental document. Additionally, he prepared the transportation/traffic chapter of the EIR/EIS/EIS.

### Camptonville Bioenergy Facility Noise Study, Yuba County

Camptonville Community Partnership

#### Noise Analyst

Zachary acted as the noise specialist and assessed whether the operation of a potential biomass facility proposed by the Camptonville Community Partnership would be compatible with the nearest off-site residential receptors. Multiple sound level measurements were collected, both short- and long-term, to characterize the existing noise environment on and around the project site. Based on sound level measurements previously conducted by Ascent at another similarly sized biomass facility, the level of noise exposure at the nearest off-site residential receptors to the proposed project site was estimated. Project-specific noise sources included a boiler, turbine, pumps, and industrial fans, as well as trucks delivering chipped biomass to the site and a loader operating in the fuel storage area. Because the study findings determined that the receptors could be exposed to noise levels that exceed both exterior and interior noise standards established in the Yuba County General Plan, noise reduction measures necessary to reduce exposure levels to an acceptable level were identified.

### Auburn State Recreation Area General Plan and Resource Management Plan and EIR/EIS

California State Parks/U.S. Bureau of Reclamation

#### Environmental Planner

The Auburn State Recreation Area General Plan and Resource Management Plan is a comprehensive land management plan for the approximately 30,000-acre Auburn State Recreation Area. The plan includes lands along the North and Middle Forks of the American River that are owned by the U.S. Bureau of Reclamation and the Bureau of Land Management, and managed by California State Parks. Zachary prepared the noise analysis for the project, which included detailed noise modeling of potential construction and operational activities. More specifically, the analysis addressed stationary noise sources such as parking lot and campground noise, ground vibration from in programs or improvements.



## Dimitri Antoniou, AICP

### SENIOR AIR QUALITY/GHG/NOISE

#### YEARS OF EXPERIENCE 11

#### EDUCATION

MS, City and Regional Planning,  
California Polytechnic State University,  
San Luis Obispo, 2010

BS, Environmental Management and  
Protection, California Polytechnic State  
University, San Luis Obispo, 2008

#### CERTIFICATIONS

American Institute of Certified Planners  
(No. 02817)

#### TRAINING

Lakes Environmental AERMOD Air  
Dispersion Modeling Course

GIS Mapping and Disaster Planning  
Contractor: Cal Fire San Luis Obispo

#### SOFTWARE CAPABILITIES

ArcGIS, CalEEMod, AERMOD, HARP,  
Google Earth, Microsoft Office Suite,  
Adobe Design Suite

#### PROFESSIONAL AFFILIATIONS

American Planning Association  
California (APACA), AICP (2014-present)

#### PUBLICATIONS

Antoniu, Dimitri Theodore. (2010).  
Background Report for the Water  
Conservation Handbook. MS of City and  
Regional Planning. California Polytechnic  
University, San Luis Obispo, CA.

#### FOREIGN LANGUAGE

Greek

#### REPRESENTATIVE PROFESSIONAL PRESENTATIONS

September 2017. "Community Risk  
Reduction Strategy: A Hayward Case  
Study," Session Speaker, Sacramento  
Valley Section APACA Speaker Series,  
Sacramento

Dimitri Antoniou, AICP, is a senior air quality/greenhouse gas, energy, and noise specialist with 11 years of experience conducting, reviewing, and overseeing the preparation of technical analyses for CEQA compliance. He is proficient in the use of multiple emission estimation models (e.g., California Emissions Estimator Model [CalEEMod], the emission factors model [EMFAC], Off-Road Emissions Inventory Program [OFFROAD]), GHG prediction protocols (e.g., Local Government Protocols, AP 42 emission factors), and various noise prediction models (e.g., Traffic Noise Model [TNM]). Dimitri also has extensive knowledge of tools and software used to conduct health risk assessments (HRAs), such as air dispersion modeling software AERMOD, and the risk assessment tool HARP. His technical proficiency and understanding of the modeling tools and methods used in CEQA analyses position him as a leader in Ascent's air quality, GHG, and noise technical practice. He provides technical assistance to Ascent's staff, clients, and regulatory agencies regarding appropriate methods of analysis for consistency with local (e.g., air districts, noise ordinances), state (e.g., CEQA case law, CARB Scoping Plan), and federal (NEPA, HUD) laws. In addition, he oversees the preparation of HRAs, ranging from small construction to large university campus projects, and reviews all technical modeling for accuracy and compliance with CEQA. He also trains technical staff on the use of air dispersion models, mass emissions models, noise monitoring and noise modeling (e.g., traffic noise, stationary noise sources). Dimitri regularly conducts peer reviews of other consultants' work for CEQA compliance and technical adequacy, including reviews of model inputs and assumptions. He has a deep understanding of the various types of CEQA documents and associated different levels of technical analysis needed for each, always applying this extensive knowledge when preparing scopes of work, developing technical approaches to analyses, and conducting quality control reviews.

#### PROJECT EXPERIENCE

##### Tahoe Transportation District Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) EIR/EIS, Tahoe Basin

Tahoe Metropolitan Planning Organization

##### Noise Analyst

Ascent worked with TMPO to prepare a program-level EIR/EIS for the Tahoe RTP and SCS. The TRPA and TMPO jointly updated the Tahoe Basin's RTP, in conjunction with an update of the Tahoe Regional Plan. The RTP/SCS includes the policies, investments, and funding strategies that will shape the region's transportation system over the next 25 years. The RTP will also serve as the Transportation Plan required by the Tahoe Compact as part of the TRPA Regional Plan update. Finally, the plan meets the challenge of California's Senate Bill 375 by presenting an integrated set of land use plans and transportation investments that will allow the region to achieve state targets for reducing GHG emissions by 2035. Ascent prepared the EIR/EIS, which was certified in December 2012. The RTP/SCS has been approved and is being implemented. Dimitri conducted traffic noise modeling for the affected roadways in the Lake Tahoe Basin as well as the noise analysis for implementation of the entire RTP.

# Attachment B

## Dimitri Antoniou, AICP

### State Route 89/Fanny Bridge Community Revitalization Project EIR/EIS/EA, Placer County

Tahoe Transportation District

#### Noise Analyst

To provide congestion relief, TTD proposed improvements to the State Route 89 North Tahoe “Wye” intersection and Fanny Bridge over the Truckee River. The improvements involved: congestion relief features at the highway intersection, construction of a new bridge over the Truckee River, rehabilitation and replacement of Fanny Bridge, and bicycle and pedestrian facilities (including connection to the Truckee River bike path). Alternative uses of the existing Fanny Bridge include continued highway use, limited local automobile access, or pedestrian and bicycle use only. Key issues were impacts to the Truckee River, historic resources, land use impacts, aesthetics, construction noise and air quality, and traffic and transportation advantages and disadvantages of the alternatives. Dimitri conducted the noise analysis, which evaluated traffic-related noise increases as well as short-term construction noise.

### US 50/South Shore Community Revitalization Project EIS/EIS/EIR

Tahoe Transportation District

#### Air Quality and Climate Change Analyst

The US 50/South Shore Community Revitalization Project would realign US 50 in the Stateline casino corridor and convert the existing US 50 roadway, between Park Avenue in California and Lake Parkway in Nevada, into a two-lane roadway with a center, landscaped median and turn pockets at major driveways and intersections. Expanded sidewalks and bicycle lanes would be constructed in this section within the casino corridor to improve pedestrian safety and encourage use of alternative transportation modes. The new US 50 alignment would be four lanes with left-turn pockets at intersections and entrances to businesses. A new pedestrian bridge would be constructed to connect the tourist core to Van Sickle Bi-State Park. Newly constructed replacement housing would be provided to all residents displaced by the project. Ascent in collaboration with TTD, the Federal Highway Administration, and TRPA prepared a Draft EIS/EIS/EIR for the project. Dimitri conducted the air quality and greenhouse analysis for the project and three alternatives. The analyses evaluated NEPA, TRPA, and CEQA significance criteria and included detailed emissions modeling using CalEEMod and SMAQMD’s Roadway Construction Model. Dimitri developed mitigation measures for identified significant impacts.

### Tahoe Regional Plan Update EIS, Lake Tahoe Basin

Tahoe Regional Planning Agency

#### Environmental Planner/Noise Analyst

TRPA undertook the first major update to the Tahoe Basin Regional Plan since 1987. An important focus of the update was to revitalize community centers within the Basin through implementation of redevelopment incentives, which would result in compact development, enhanced transportation systems, transfer of coverage and development out of stream zones and other sensitive lands, promotion of non-motorized trails, and other features. TRPA’s goal was to accelerate environmental carrying capacity threshold attainment through specific revisions to goals, policies, and Code provisions to incentivize redevelopment, promote compact mixed-use projects, and create walkable communities. The update process has undergone extensive community engagement, discussions between California and Nevada, and detailed environmental review. Ascent led the preparation of the EIS for the Regional Plan Update, which was adopted in December 2012. Dimitri prepared the public safety and noise impact sections for the Regional Plan Update EIS.

### Road and Trail Change-in-Use Evaluation Process Program EIR, Statewide

California State Parks

#### Air Quality, Climate Change, and Noise Analyst

The California State Parks proposes to implement the program on a statewide scale to facilitate the review of proposals to change uses of existing recreational roads and trails throughout the State Park System. Potential project actions that may result from a change-in-use include reconstruction of an existing road or trail; installation of speed control or use separation devices; minor rerouting of trail alignments to correct an existing environmental problem; installation of hardened surfaces; closure, decommissioning, and restoration of existing roads and trails; or conversion of roads to trails. Ascent prepared the PEIR for CSP’s Road and Trail Change-in-Use Evaluation Process Program. Key issues addressed in the PEIR were erosion, stream sedimentation and water quality, cultural resources, sensitive species and habitats, and scenic impacts. Dimitri prepared the air quality and noise sections for this document. The air quality analysis was conducted using URBEMIS software and determined acceptable air quality mass emission limits that all change-in-use projects occurring throughout the state must comply with to meet all California air districts’ recommended air quality thresholds. The noise analysis required the development of specific project requirements that all change-in-use projects would be required to follow so that excessive noise would not adversely impact any residence in close proximity to any of the California state parks.

# Attachment B



## Design Workshop

### Education

Masters of Landscape Architecture,  
Utah State University

Bachelor of Science, Horticulture,  
Brigham Young University

### Licensure and Certifications

Professional Landscape Architect: CA,  
UT

American Institute of Certified  
Planners

LEED® Green Associate™

### Professional Affiliations

American Planning Association

American Society of Landscape  
Architects

### Recent Awards and Honors

ASLA National Honor Award in  
Analysis and Planning, Mariposa  
County Recreation and Resiliency Plan

APA California Best Practices Award,  
Mariposa County Recreation and  
Resiliency Plan

ASLA Nevada, Honor Award –  
State Route 28 Recreation Corridor  
Management Plan

APA California Best Practices Award,  
Mariposa County Recreation and  
Resiliency Plan

ASLA Nevada, Honor Award in Parks  
and Trails – Lake Mead Parkway Trail  
& Wetlands Trail Master Plan

ASLA Nevada, Merit Award – Kings  
Beach Vision Plan

## Stephanie Grigsby PLA, AICP, LEED® GA™ PRINCIPAL

Stephanie Grigsby, a Principal and board member of Design Workshop joined the firm in 2000 after receiving her Masters of Landscape Architecture from Utah State University. She is committed to planning and designing vibrant communities and social spaces and that work has been honored with awards and more importantly with happy clients and communities. Stephanie employs a comprehensive approach that is scalable to meet individual project needs; synthesizing a broad range of information to achieve clear and innovative results. She implements the firm's values of transparency, comprehensiveness, iteration and measurability in order to develop collaborative, implementable designs. Her work ranges from garden and site design to assessing and planning for large scale regional landscapes. Her award-winning work with the Nevada Department of Transportation set the new standard for addressing aesthetics and the environment along highway corridors and she has led a number of parks, trails and open space planning projects. Stephanie's approach includes a broad understanding of the physical, economic and political landscape with an appreciation of the subtleties that make each landscape special in order to craft designs that celebrate each distinct environment.

### Select Project Experience

Mariposa County Recreation and Resiliency Plan – Mariposa County, CA

IVGID Community Services Master Plan – Incline Village, NV

Placer County Parks & Trails Master Plan – Placer County, CA

SR89 Recreation Corridor Management Plan – El Dorado County, CA

Big Sur Highway 1 Sustainable Transportation Management Plan – Cambria to Carmel, CA

North Lake Tahoe Active Recreation Facility & Feasibility Study – Lake Tahoe

SR 28 Corridor Management Plan — Lake Tahoe Basin, NV

Van Sickle Bi-State Park Master Plan and Vision Plan – South Lake Tahoe, CA and Stateline, NV

Eastern Sierra Highway 395 Corridor Enhancement — Eastern Sierra, CA

Kings Beach State Recreation Area General Plan Update – Placer County, CA

Douglas County Open Space Plan – Douglas County, NV

# Attachment B



## Design Workshop

### Education

Bachelor of Science, Landscape Architecture, California Polytechnic State University

Study Abroad, European Gardens, Ecole des Deux Arts, Fountainbleu, France

### Licensure and Certifications

Professional Landscape Architect: California #3300, Nevada #510

Council of Landscape Architectural Regulatory Boards (CLARB), #1153

American Institute of Certified Planners

### Professional Affiliations

American Society of Landscape Architects, California Chapter

Urban Land Institute (ULI) Associate Member

Sierra Business Council Board Member, Truckee, California

### Awards and Honors

ULI Placemaking Awards, Visionary Place, Downtown Las Vegas Trails and Open Space Master Plan

ULI Placemaking, Award of Excellence, Transformative Place Award - Carson City Downtown Revitalization

## Steve Noll PLA, AICP PRINCIPAL

Steve Noll has been practicing landscape architecture and land planning since graduating from California Polytechnic San Luis Obispo, California. Steve's first 14 years of practice were spent in San Francisco developing awareness of the physical and social aspects important for "great" urban spaces. The nationally and internationally successful projects Steve has been involved with reflect his understanding of these aspects. In 1997, Steve moved to South Lake Tahoe to open and oversee the development of the office.

Because of the strict regulatory environment and difficult economic challenges associated with many of his projects, Steve has developed the respect and trust of public agencies while navigating his clients through the complex permitting and implementation process. In addition, he is involved with many community-based organizations where he provides guidance in areas of mixed-use planning, recreation and public access design and planning, community design, and main street improvement plans.

### Selected Project Experience

Mammoth Lakes Design Guidelines – Mammoth Lakes, CA

Eastern Sierra Highway 395 Corridor Enhancement — Eastern Sierra, CA

Trails End Park – Mammoth Lakes, CA

June Lake and Lee Vining Streetscapes – June Lake and Lee Vining, CA

Performing Arts Center – Mammoth Lakes, CA

Van Sickle Bi-State Park Master Plan and Implementation – South Lake Tahoe, CA and Stateline, NV

Kings Beach Commercial Core Streetscape – Kings Beach, CA

Valley Springs Complete Streets – Valley Springs, CA

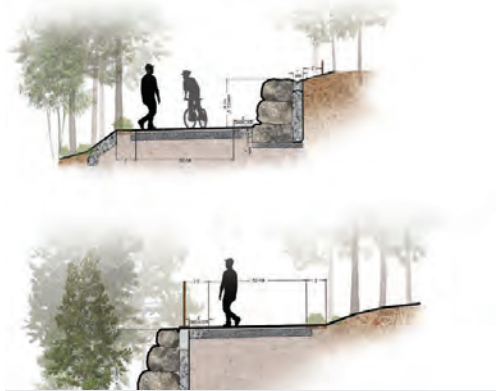
North Main Street Complete Streets – Angels Camp, CA

Veteran's Memorial Beach Park Master Plan – Healdsburg, CA

Roseland Community Park and Trail – Santa Rosa, CA

56 Acre Park Master Plan – South Lake Tahoe, CA

# Attachment B



## Design Workshop

### Education

Bachelor of Science Landscape Architecture, University of Massachusetts-Amherst, 2000

### Licensure and Certifications

Professional Landscape Architect, California #4926, Nevada #1086

LEED AP

Certified Construction Document Technologist (CDT)

### Professional Affiliations

Associate, American Society of Landscape Architects

### Recent Awards and Honors

NV ULI Placemaking, Award of Excellence, Transformative Place Award - Carson City Downtown Revitalization

California ASLA, Honor Award – Tahoe Historic Hatchery, Tahoe Vista, CA

California ASLA, Merit Award – Jackie Lee Houston Plaza, Palm Springs, CA

Honor Award, Nevada ASLA: Heritage Park Campus

TRPA Best in the Basin:

- Kings Beach Commercial Core
- Bijou Bike Park
- Fish Hatchery Renovation
- Tahoe City Heritage Plaza
- Harrison Ave Streetscape

## Benjamin Fish

 PLA, LEED AP, CDT  
PROJECT MANAGER

Benjamin Fish is a talented project manager, skilled in working collaboratively across disciplines and on a variety of project types. Over the last decade he has been involved in a number of parks and recreation projects. His experience includes many award-winning built works ranging from the 160-acre Heritage Park in Henderson, NV to the highly designed plaza at the Palm Springs Convention Center. He spends his free time volunteering as President for the nonprofit Tahoe Area Mountain Biking Association. His experience includes many recreation, mobility, and trail projects ranging from public parks to trail connectivity projects. With successful design and management skills gained over the last 20 years, Benjamin will apply his knowledge to encourage collaborative design, communication and a process that runs smoothly.

### Selected Project Experience

Rancho Corral de Tierra Feasibility Study and Management Plan – San Mateo County, CA

Heavenly Epic Discovery Master Plan – South Lake Tahoe, CA and Stateline, NV

Tahoe Donner Trails Master Plan Update – Truckee, CA

Carcione and Canepa Ranch Trailheads Master Plan – Mogul, NV

Van Sickle Bi-State Park Master Plan and Vision Plan – South Lake Tahoe, CA and Stateline, NV

Stonegate Adventure Park – Reno, NV

Truckee River Recreation Access Plan – Tahoe City to Truckee, CA

Spoooner Lake State Park Front Country Improvements – Lake Tahoe, NV

Placer County Parks and Trails Master Plan – Placer County, CA

East Silver Saddle Ranch Master Plan – Carson City, NV

Corral Trail Enhancement – South Lake Tahoe, CA

Bijou Bike Park – South Lake Tahoe, CA

Tahoe Donner Trails Master Plan Update – Truckee, CA

56 Acres Park Master Plan – South Lake Tahoe, CA

**ASHLEY SMITH**  
SENIOR PROJECT MANAGER



A highly-committed and incisive project manager, Ash excels while working on and managing large-scale and complex projects. Specializing in NEPA, her experience, insight, and enthusiasm allow her to efficiently navigate projects and clients through today's complicated regulatory environment. Ash thrives on finding the right solutions for the challenges of our projects. She takes particular pride in getting the job done accurately and on time—enabling our clients to move forward with their project goals.

#### Areas of Expertise

- Large-scale Project Management
- Environmental Permitting and Compliance
- NEPA Oversight

#### Affiliations/Memberships

- National Association of Environmental Professionals

#### Awards

- U.S. Forest Service Region 2 2019 Regional Forester's Award for Innovation

#### Appointments

- Summit County Planning Commissioner - Lower Blue Basin
- Summit County Wildfire Council - Lower Blue Basin Representative

#### Publications

- "Integrating Ecology and Poverty Reduction: Ecological Dimensions," Springer Science + Business Media LLC, 2012
- "Watershed Land Use and Aquatic Ecosystem Response: Ecohydrologic Approach to Conservation Policy," Journal of Hydrology, 2009

#### Experience

Joining SE Group in 2016, Ash brings 15 years of experience in the field of environmental permitting and planning, in a wide range of planning sectors including recreation, forest health and fuels, energy and telecommunications. She has successfully managed and authored environmental analyses throughout the Rocky Mountains, Southwest, West Coast, and Northeast regions. Prior to joining SE Group, Ash worked for Kleinfelder as an Environmental Permitting & Planning Project Manager (CO) and as a Staff Scientist (CT and NM).

Ash has a Master of Science in Watershed Science and Management from the University of Massachusetts, Amherst and a Bachelor of Arts in Geology and Environmental Science from Smith College.

#### Select Projects

##### Forest Health and Fuels

- McGaffey Forest and Watershed Restoration Project EA, New Mexico
- Ruby Ranch Fuels Project CE, Colorado
- Booth Creek Forest Health and Fuels EA, Colorado
- North Yuba Landscape Resilience Project EIS, California
- Sierra-at-Tahoe Vegetation Management and Fuels Candor Fire Response Project, California
- Steamboat Ski Area Blowdown Vegetation Management Project, Colorado

##### Recreation and Tourism Focus

- Aspen Pandoras and Snowmaking EA, Colorado
- Aspen Highlands Nugget SIR, Colorado
- Lusten Mountains SUP EIS, Minnesota
- Sandia Peak Ski Area Mountain Coaster CE, New Mexico
- Steamboat Resort Improvements EA, CO
- Snowmass Snowmaking and Elk Camps EA, Colorado
- Snowmass 2017 Projects CE, Colorado
- Steamboat Ski Resort EIS, CO

##### Utilities Focus

- Crescent Point Energy Programmatic EA, Utah
- Northern Pass Transmission Line Project EIS, New Hampshire
- Pitkin County Telecommunications CEs, Colorado
- Village of Taos Ski Vally Wastewater Treatment Facility EIR, New Mexico



## ANITA MANITIUS

### ASSOCIATE MOUNTAIN PLANNER



#### Areas of Expertise

- 3D graphic and landscape modelling
- Visual Simulation
- Graphic Design
- CAD design and terrain analysis
- Site Planning and Design

Anita's passion for the natural world and recreation has imbued her with a desire to contribute to thoughtful and sustainable design practices. Anita synthesizes this passion with the technical and analytical skills developed through her forestry and landscape architecture training to create visually compelling graphics and plans, making her an invaluable member of SE Group's planning and design teams.

#### Experience

Anita joined SE Group in 2017. Her pursuit of landscape design and mountain planning was born from her love of being outside and extensive travels. Anita completed a Bachelor of Science in Forestry in Natural Resources Conservations from the University of British Columbia. The degree solidified her appreciation of the mountains and forests and provided a strong foundation to pursue mountain planning.

Anita also holds a Master of Landscape Architecture from John H. Daniels Faculty of Landscape, Architecture and Design from the University of Toronto. By combining her knowledge of Forestry and Landscape Architecture, Anita brings a valuable perspective to the mountain planning team.

#### Projects

- Mammoth Mountain 2021 Master Development Plan, California
- Tamarack Resort Master Development Plan, Idaho
- Mt Hood Ski Bowl Master Development Plan, Oregon
- Squaw Valley Interconnect Gondola Visual Simulation, California
- Catalina Island Gondola Visual Simulation, California
- Sun Valley Resort Cold Springs Lift Replacement Planning and Visual Simulation, Idaho
- Mayflower Resort Planning and Visual Simulation, Utah.
- Deer Valley Improvements Visual Simulations, Utah
- Hemavan Resort Master Plan, Sweden
- Bear Valley Master Development Plan, California
- Eldora Parking Expansion Visual Simulation, Colorado
- Mammoth Base Land Exchange Environmental Impact Statement, California
- Brundage Mountain Master Development Plan, Idaho
- Alyeska Resort Base Area Master Plan, Alaska
- Chengde Resort Ski Area Design, China
- Ecos Solar Visual Simulations, Vermont
- Big Bear Mountain Resort Master Development Plan, California
- Xcel Energy Cell Tower Visual Simulation, Colorado
- Isafjordur Resort Master Plan, Iceland
- Aspen Snowmass Master Development Plan, Colorado
- Solitude Resort, Utah
- Falls Creek Alpine Resort Chairlift Replacement Plan, Australia
- Berlaimont Estates Visual Simulation, Colorado

## STEVEN R. FRISCH

PRESIDENT, SIERRA BUSINESS COUNCIL



### CONTACT

📞 530.277.3762

✉️ sfrisch@sierrabusiness.org

📍 P.O. Box 2428, Truckee, CA 96160

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### PROFESSIONAL EXPERIENCE

#### **Sierra Business Council, President: Oct 2007- Present**

- Responsible for financial and operational oversight of a multifaceted non-profit organization managing programs in community development, environmental improvement, sustainable business practices and leadership development disciplines
- Implements full suite of non-profit fundraising activities including development of major donors, foundation support, membership, corporate support, and special events
- Responsible for board development and board relations
- Oversees and implements a regional, state and nationally focused communications and outreach plan
- Oversees strategic direction, annual planning, program development and management

#### **Sierra Business Council: 2000 - 2007**

- Jan 2005-Oct 2007, Vice President for Program Development
- June 2003-Jan 2005, Director of Natural Resource Programs
- Jan 2000-June 2003, Program Director, Placer Legacy and Sierra Nevada Conservancy

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### EDUCATION

- University of Illinois, Chicago (1977-1979) San Francisco State University (1979-1981)
- Bachelors of Arts: Political Science California Culinary Academy (1981-1983)
- Executive Chef Certification, American Culinary Federation Sierra Leadership Institute, Certificate (1998)
- Stanford Graduate School of Social Innovation, Certificate, Executive Program in Strategy and Organization (2007)

## STEVEN R. FRISCH

(CONTINUED)

### LEADERSHIP/ CERTIFICATIONS

#### **Professional Memberships/Past Service**

- Member Congress for the New Urbanism; American Planning Association; CivicWell, United States Green Building Council; Local Government Sustainable Energy Coalition, Sierra Business Council
- Board Member, California Stewardship Network
- Board Member, Northern Sierra Partnership
- Past Board Member, Capital Public Radio
- Past Board Member, Sierra Biomass Utilization Task Force
- Past Board Member, California Cultural and Heritage Tourism Council
- Past Board Member, Sierra Cascade Land Trust Council
- Advisor, California Legacy Project
- Participant, United States State Department, Bureau of International Speakers Program (Fulbright Scholarship), Mongolia & China

#### **Courses/Accreditations/ Awards**

- Environmental Planning and Site Analysis, University of California Davis, Extension
- Habitat Conservation Planning, University of California Davis, Extension
- Community Involvement and Communication in Planning, University of California Davis, Extension
- International Association for Public Participation, Certified
- Center for Social Innovation, Executive Program in Social Entrepreneurship, Stanford University
- Sierra Leadership Institute, Sierra Business Council
- Winner Governor's Award for Economic and Environmental Leadership, Placer Legacy, 2002
- Winner Governor's Award for Economic and Environmental Leadership, 2004
- Winner of the California Preservation Foundation Presidents Award

# Attachment B

## Kristin York

530.210.3434 :: [Kristin\\_york@yahoo.com](mailto:Kristin_york@yahoo.com)  
[http://www.linkedin.com/profile/Kristin York](http://www.linkedin.com/profile/Kristin_York)

### Profile ::

Senior level executive with expertise in strategic business transformation, finance, marketing and operations with a focus on ESG. Industry specific skills in hospitality, real estate, construction, energy, manufacturing, food systems and local governments with exceptional analytical, financial modeling, planning, conflict resolution, professional training, presentation & talent development skills. Excellent communicator, creative problem solver and natural team builder with a unique holistic, systems perspective to complex situations.

### Professional Experience ::

**SIERRA BUSINESS COUNCIL** - Truckee, CA June 2014 – Present

**Vice President of Operations & Director, Small Business Development Center**

- Direct all operations and staff for triple bottom line nonprofit focused on public private partnerships for economic growth, resilience and community prosperity.
- Deliver direct technical assistance designed to facilitate the advancement of enterprise-wide environmental, social and governance goals.
- Perform economic impact analysis, feasibility and ROI calculations of proposed projects for real estate, hospitality, agriculture, education and government clients.
- Implement direct technical assistance program in N.E. California focused on entrepreneurship, capital infusion, job creation and small business revenue growth.
- Design and implement revolving loan program, business incubator and pitch camp focused on entrepreneurial ventures in need of roadmaps for business planning, marketing, social media, B Corp certification, succession planning, and financial management.

**CUTTING EDGE CAPITAL / SUSTAINAMETRICS** – Oakland, CA June 2008 – June 2014

**Director of Development / Consultant**

- Design high performance, purposed-based business models focused on systemic transformational strategies based on ESG objectives to generate long-term value creation, anticipate market trends, capture cost savings and leverage green efforts for competitive advantage.
- Create climate action plans, greenhouse gas inventories, carbon mitigation, energy, water and waste management plans, sustainable purchasing policies and CSR reporting.
- Metrics dashboard development to facilitate business case decision-making
- Key Engagements include; investor prospectus and financial models for small to medium sized businesses, sustainable food system capitalization model, cap and trade implementation training for California Air Resources Board, Green Seal hospitality certifications, climate action planning, and materiality assessments.

**SUGAR BOWL SKI RESORT** – Norden, CA 2001 - 2007

**Marketing Manager**

- Led sustainability initiatives and built internal coalition to become first resort in nation to offset 100% of power needs with renewable wind energy.
- Prepared annual marketing plan including financial performance goals, KPI and operating targets; created quarterly business review for Board of Directors and owner group.
- Cost / benefit analysis for new initiatives, programs and market opportunities.
- Oversee customer experience enhancement program to deliver world-class service to

# Attachment B

resort guests.

**HEXCEL CORPORATION** - Pleasanton, CA 1997 - 1999

**Global Operations Director – Lean Manufacturing**

- Managed enterprise-wide Lean business transformation in \$4 billion multi-national corporation with vertical supply chain.
- Developed strategic vision and implementation plan including; best practice performance metrics, product line profitability and financial reporting packages in change effort to successfully lead Company out of Chapter 11 bankruptcy.
- Facilitated training and planning sessions for integration of lean global manufacturing with cross-functional teams across multiple strategic business units.
- Drafted enterprise wide procedures for reporting of continuous improvement.
- Scripted CEO's speeches, drafted investor relations communications; developed presentations for key stakeholders.

**ARTHUR ANDERSEN, LLP** - San Francisco, CA 1990 - 1997

**Senior Manager – Corporate Financial Restructuring & Strategic Services**

- Advised financially distressed companies in operational turnaround, financial restructuring, mergers and acquisitions and conflict resolution. Developed leverage strategies to maximize value and facilitate the return to corporate viability.
- Cash flow forecasting and management, strategic business planning, profitability analysis, feasibility studies, valuation and financial modeling for real estate, hospitality, manufacturing and healthcare clients.
- Bankruptcy administration, liquidation and stakeholder analysis.
- Created customer and product-line rationalization scenarios for profit maximization based on statistically significant indicators.
- Business process modeling and implementation including project management, facilitation, planning, metrics, teambuilding and presentations to communicate results.
- Corporate litigation analysis including business interruption, fraud investigation, lost profits and damage calculations related to insurance claims.
- Performed financial audits in conformance with GAAP standards and participated in government compliance and SEC audits.

## Education & Certifications ::

- Executive MBA – Sustainable Business Management, Presidio Graduate School 2009
- M.B.A. – Finance, University of San Francisco, with honors 1990
- B.S. – Hospitality Management, University of San Francisco 1987
- Qualified Meyers Briggs trainer
- Arthur Andersen Facilitator Certificate
- Certified Turnaround Manager & Carbon Reduction Manager

## Additional Relevant Experience ::

**Presidio Graduate School – Adjunct Professor (2010 to Present)**

- Implementation of Sustainable Business
- Sustainable Development and Economic Policy

**Public Board Affiliations (2010 to Present)**

- Truckee Donner Recreation & Parks District – Board Chair
- Tahoe Truckee Community Foundation – Board Member



### Education

Bachelor of Science in  
Civil Engineering,  
University of  
California, Berkeley

### Professional Registrations

Registered  
Professional Engineer  
(Civil) in California  
and Nevada

### Professional Memberships

Institute of  
Transportation  
Engineers (ITE)

Chi Epsilon, National  
Civil Engineering  
Honor Society



### PROJECT EXPERIENCE

Since joining LSC in 2001, Sara Hawley has been the Project Manager for a variety of projects such as the following:

- Sierra Boulevard Complete Streets Project
- Donner Pass Road Pedestrian and Corridor Improvements
- Lake Tahoe Boulevard Pedestrian Crossings Evaluation
- Placer County Tahoe Basin Area Plan EIR
- Mammoth Lakes Mobility Plan EIR
- US 101 Crescent City Gateway PSR
- Angels Camp Main Street Corridor Study
- Tahoe Truckee Unified (improvements at seven school sites)
- Elk Valley Road Multi-Modal Corridor Plan

Previously, Sara worked as a field engineer and was promoted to Assistant Project manager with Webcor Builders while working on commercial and residential construction projects. She also worked as a project controls engineer for Bechtel Corporation, where she was involved with an oil refinery upgrade project located in Saudi Arabia. During her high school and college years, Sara served as an AutoCAD Technician in the U.S. Army Corps of Engineers and as both an estimator and field engineer with two construction companies.

Sara is skilled in supervising, problem-solving, estimating, budgeting, negotiating contracts and working with clients, reviewing agencies, and consultants. Sara Hawley is a principal in the Tahoe City, California office. Sara has worked on a variety of public and private traffic engineering projects, including commercial, industrial, residential, recreational, city, county, state, and federal projects in California, Nevada, Idaho, Montana, Utah, and Colorado. Her work includes project management, traffic studies for EIRs, traffic and parking impact analysis, corridor plans, site access design, roadway alignments and cost estimates, turn lane design, drafting roadway profiles, cut and fill calculations, and evaluation of pedestrian and bicycle facilities.

# Attachment B

## Kevin Whitlock

P.O. Box 363

Nevada City, CA 95959 USA

(530) 274-7390 (O) (530) 559-0901 (C)

Email: [underthetrees@att.net](mailto:underthetrees@att.net)

[www.linkedin.com/in/underthetrees/](http://www.linkedin.com/in/underthetrees/),

<https://uttforestry.com/>.

## UNDER THE TREES, INC.

Natural Resource Management Consultant

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**QUALIFICATIONS:** Over 25 years of operational planning in sustainable forest management, timber export and trade, timber processing, logging, project design, implementation, and monitoring, ecosystems services assessment, and valuations in the extraction industry.

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### EDUCATION:

Master; Business Administration, California State University Dominguez Hills

Bachelor; Science, Natural Resource Management – Forestry, Humboldt State University

Associate; Science, Forest Technology, Sierra College

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### CERTIFICATIONS/LICENSURES:

California Registered Professional Forester, #2436

Forestry Appraisal Certificate

Archaeological Training Certificate

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### PROJECTS

- **Forestry Management**, *National Forest Foundation, Sierra National Forest, CA. 2019 to the Present.* Blue Rush 10S18 Fuels Reduction & Roadside Hazard Reduction Project. Managing the implantation and administration of forest restoration and roadside hazard reduction project. Duties include but are not limited to: implementing project objectives and management requirements as contained in Forest Service planning decision document, and ensuring the implementation contractor adhere to the guidelines and prescriptions.
- **Forestry Advisor**, *Nevada Irrigation District, Grass Valley, CA. 2015 to the present.* Fee lands 25,900 ha. Perform geospatial modeling to improve understanding of the current conditions of the forest. Provide technical advice on ecosystem services assessment and valuation. Developed a sustainable financial model to reduce the threat of catastrophic wildfire, enhance water yield and capture economic value through the sale of forest products, and carbon credits.
- **Base to Base Gondola Environmental Impact Report**, *Squaw Valley Resort, Olympic Valley, CA. 2015 to the present.* Sub-consultant for the preparation of an Environmental Impact Report - Alpine Meadows/Squaw Valley Base to Base Gondola.
- **Forest Resource Manager/Transition**, *Usal Redwood Forest Company, LLC, Mendocino, CA. 2015/2016.* Usal Forest 127,000 ha. Supervised and administrated the Usal Redwood Forest Company transition, including budget preparation, fund raising, collateral report and monitoring; development of capital equipment plans; purchasing and financial transactions; timber harvesting contracts; developing and recommending policies and procedures related to forest and natural resources management, conservation easements, carbon finance, and FSC certification; performance management; employee relations; prioritizing and assigning work and related activities.

## Attachment B

- **Forest Health Timber Harvest & Biomass Removal Projects**, *Squaw Valley Resort, Olympic Valley, CA. 2012 to the Present*. Designed and implemented a long-term sustainable forestry program to improve forest health, increase snow loading and water yield. Projects on-going. The following video is one project of the program. <http://vimeo.com/114406440>
- **Preservation Area Management, Forestry, Biomass Harvesting & Ecosystem Restoration**, *The Nature Conservancy, Reno, NV. 2008 to the Present. Independence Lake Preserve, 1180 ha*. Designed a sustainable forest landscape program and ecosystem restoration plan that protects the endangered Lahontan Cutthroat Trout through improved forest health, reducing the threat of catastrophic wildfire, enhancing water yield and improving user experience. The design was based on the General Technical Report 220, An ecosystem management strategy for Sierran mixed-conifer forests, USDA 2009.
- **Forest Inventory and Baseline Measurements for GHG Calculations**, *The 1850 Trust, Walter and Esther Hewlett, and Flora Hewlett Birdzell, Placer County, CA. 2014. 670 ha*. Designed and implemented a sustainable forestry program to improve forest health, and reduce the threat of catastrophic wildfire based on GTR-220. Designed and implemented forest carbon stock inventory stratified by forest type and successional stage relative to land area; identified degree of fragmentation of vegetation types, conducted forest health analysis establishing a baseline scenario using growth modeling for GHG offsets and fire hazard reduction.
- **Timberland Acquisition Pro-Forma Analyst**, *The Nature Conservancy (TNC), CA. 2012. 3,940 ha*. Analyzed and made recommendations on an \$8 million (USD) pro forma timberland acquisition which included ecosystem services, carbon stock change, environmental impact analysis, and forest health.
- **Oak Woodland Carbon Inventory**, *Placer Land Trust, Placer Co, CA. 2011. Harvego Preserve, 680 ha*. Designed and implemented forest carbon stock inventory stratified by forest type and successional stage relative to land area; conducted forest health analysis establishing a baseline scenario using growth modeling for GHG offsets and fire hazard reduction; designed and delivered field and technical training.
- **Carbon Inventory and Baseline Measurements for GHG Calculations**, *North Fork Association, Placer County, CA. 2011. The Cedars 2,025 ha*. Designed and implemented a sustainable forestry program to improve forest health, and reduce the threat of catastrophic wildfire based on GTR-220. Designed and implemented forest carbon stock inventory stratified by forest type and successional stage relative to land area; identified degree of fragmentation of forest types, conducted forest health analysis establish baseline scenario and growth modeling for GHG offsets and fire hazard reduction. Designed and delivered employee field and technical training for multi-purpose forest inventory.
- **GIS Biomass Analyst, Northern Sierra Biomass Initiative**, *Sierra Business Council, Truckee, CA. 2011*. Designed and implemented a 7.2 million-hectare GIS biomass feedstock analysis and monitoring system for a clean energy project; identifying ownership, vegetation types, fire threat, past harvesting, carbon stock change, the degree of fragmentation of forest types, biomass estimates, areas of biologically and cultural sensitivity.





# Appendix B

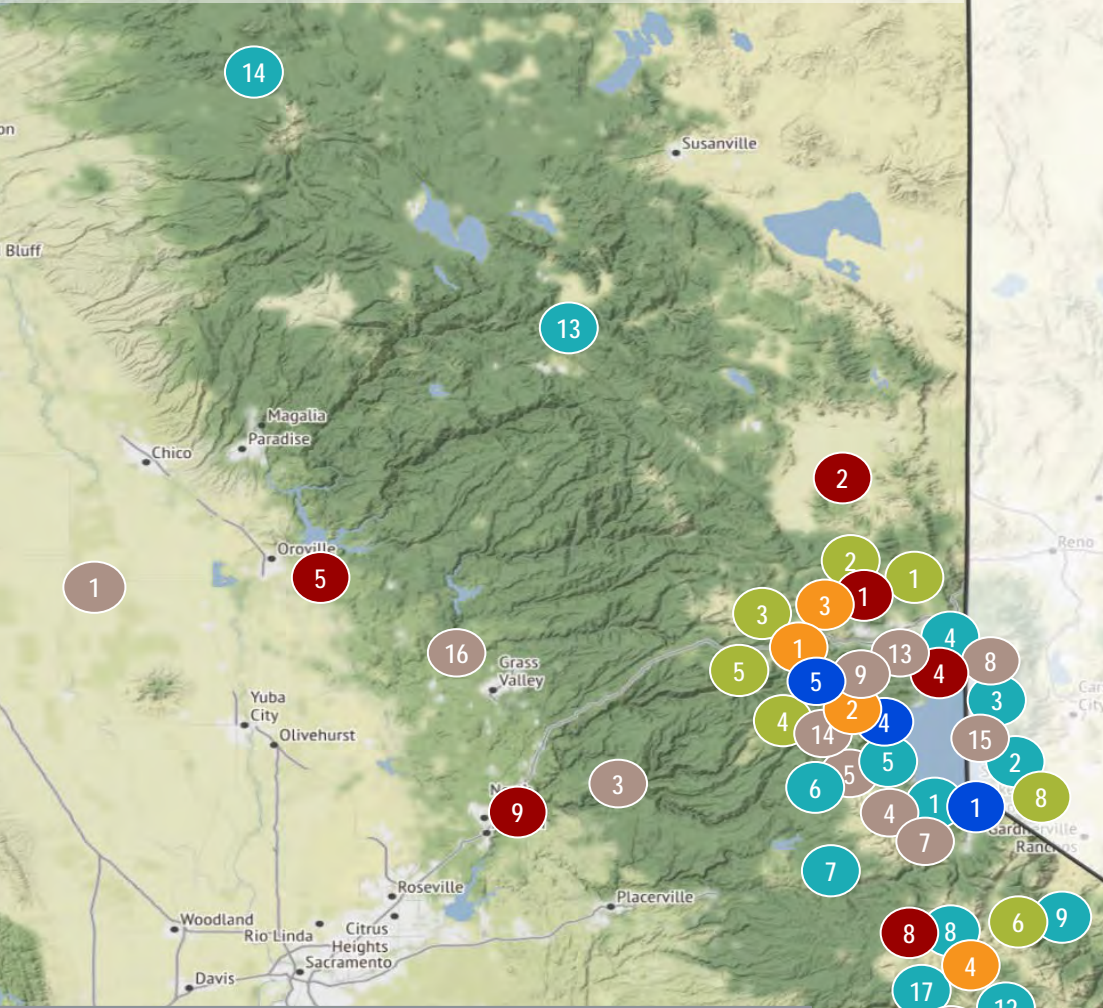
RELEVANT PROJECT EXPERIENCE



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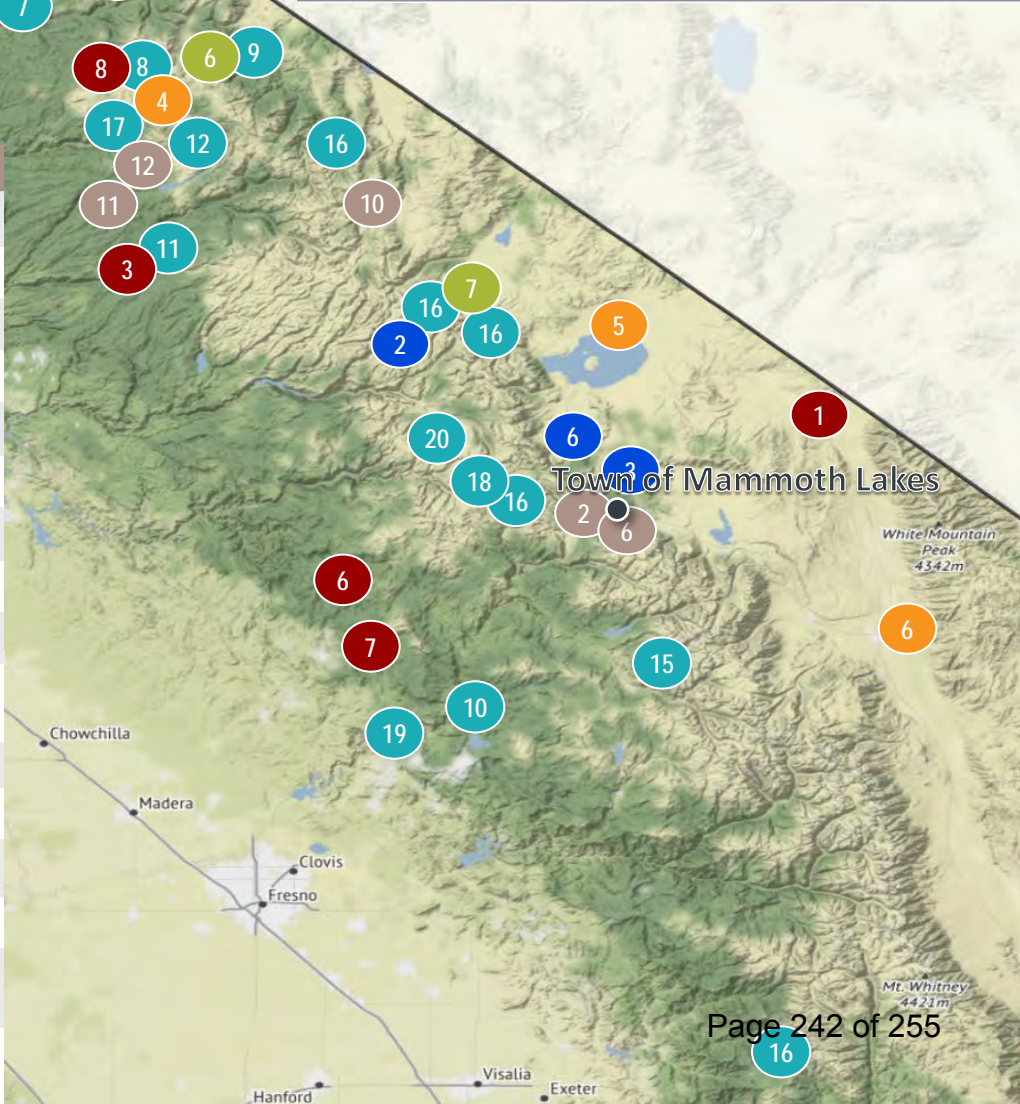


# Cardno Team Representative Sierra Nevada Region Project Experience



Ascent	
1	CalVTP EIR (statewide) Training and Implementation
2	Mammoth Mountain Base Land Exchange EIS
3	North Yuba Forest Resilience Project EIS
4	Tahoe Program Timberland EIR
5	Lake Tahoe West Landscape Restoration Project EIR/EIS/EA
6	Mammoth Main Lodge Base Specific Plan
7	CTC-USFS Urban Lots EA and SB 901 Exemption
8	NV Energy Resilience Corridors Project CE
9	Cabin Creek Biomass Project EIR
10	Sierra Nevada Conservancy Environmental On-Call Services and SB 901 Exemptions
11	Tuolumne County Biomass Projects CEQA and NEPA
12	Stanislaus National Forest Prather Medusa EA
13	CalPECO Transmission Line Upgrade Project EIR/EIS/EIS
14	Truckee River Recreational Access Plan EIR/EA
15	Nevada Stateline-to-Stateline Bikeway Facility Planning, Environmental Review, and Implementation
16	Yuba Foothills Healthy Forest Project PSA/Addendum and MMRP Implementation

Sierra Business Council	
1	Sierra Small Business Development Center (SBDC) – Sole California SBDC with focus on technical for assistance biomass utilization
2	Loyalton Biomass Campus Development – Partnership with Ceres Environmental Services
3	Blue Mountain Energy Company (Biomass/Biochar) – Partnership with Phoenix Energy
4	Forest Futures (Truckee-Tahoe Community Foundation) – Developing regional value-added wood-based businesses
5	Camptonville Biomass Facility – providing technical assistance for biomass development
6	North Fork Biomass Facility – providing technical assistance for biomass development
7	Auberry Small Diameter Timber Mill – providing technical assistance for mill development
8	Rural Community Assistance Corporation – technical assistance for improving wood utilization businesses access to capital
9	Sierra Nevada Climate Vulnerability Assessment – Sierra Nevada Conservancy



Stantec	
1	Van Norden Meadow Restoration and Recreation Project CEQA and NEPA
1	Memorial Overland Emigrant Trail/Donner Lake Rim Trail Environmental Compliance Project
1	Donner Summit Public Use, Trails, and Recreation Facilities Plan
1	Donner Summit Public Utility District Wastewater Treatment Plant Upgrade Project
2	Truckee River Siphon Replacement Project CEQA and NEPA
3	Sardine Meadow Restoration Project CEQA
4	Kirkwood Meadows Wastewater Treatment Improvements Project CEQA and NEPA
4	PG&E Blue Lake Dam Seismic Retrofit Erosion and Sediment Control
5	Mono Lake Monitoring Studies
6	Owens Valley Watershed Fish Study
Under the Trees	
1	The Nature Conservancy – 3,000-acre fuel-reduction planning at Independence Lake in the Tahoe National Forest (USFS TNF)
2	Sierra County Land Trust – 1,500-acre fuel-reduction planning
3	Bear Yuba Land Trust – 2,700-acre fuel-reduction planning
4	North Fork Association – 5,000-acre fuel-reduction planning
4	1850 Trust – 1,800-acre fuel-reduction planning
4	Placer Land Trust – Harvego Bear River Preserve
5	Scotts Flat Reservoir Fuels Treatment – Phase IV – USFS TNF
6	Markleeville/ Mahalee Lodge Project – Timber Harvest Plan, Vegetation Management Plan, and Roadside Hazard-tree Removal
7	Big Hot Springs Ranch Conservation Easement – Vegetation Management and Fire/Fuels Reduction Plan
8	Job's Peak Ranch – Defensible Space Land Management Plan
Design Workshop	
1	Van Sickle Bi-State Park Master and Vision Plan
2	Mariposa County Recreation and Resiliency Plan
3	Eastern Sierra Hwy 395 Corridor Enhancements
4	SR89 Recreation Corridor Management Plan
5	Placer County Parks and Trails Master Plan
6	Mammoth Lakes - Town Design Guidelines, Trails End Park, Mammoth Performing Arts Center, and South Gateway District Plan

Cardno	
1	South Lake Tahoe Bike Trail Projects • Nevada Stateline to Stateline Bikeway, Ph II, N. Demo Lake Tahoe Class 1 Trail • SLT Greenway Shared Use Trail – Phase 1a • Pioneer Trail Pedestrian Improvement
1	Ski Run Center, Water Quality Monitoring
1	Heavenly Mitigation and Water Quality Monitoring-USFS Lake Tahoe Basin Management Unit (LTBMU)
1	Upper Truckee and Wetland Restoration Projects • Lower West Side Restoration • Middle Reach Stream Habitat Restoration Project • Upper Truckee Marsh Component Design Evaluation • Sunset Stables Restoration and Resource Management Plan
2	Spoooner Lake Frontcountry Recreation Improvements (Cardno and Design Workshop)
3	Burgundy Hills Soil and Stream Restoration Project
4	Squaw Valley Village Phase 1 EIR – USFS TNF
5	Meeks Meadow Restoration Planning and Environmental Documentation – USFS LTBMU
6	PCWA – Middle Fork Hydroelectric Relicensing and License Implementation, including Recreation, Rehabilitation, and Forest/Recreation Resiliency Projects NEPA Clearance – USFS TNF
7	Sacramento Municipal Utility District Recreation, Rehabilitation, and Forest/Recreation Resiliency Projects NEPA Clearance - Eldorado National Forest (USFS ENF)
8	Caples Spillway Bank Stabilization and Restoration Project- USFS ENF
9	Markleeville Creek Restoration Project
10	Southern California Edison – Big Creek ALP and Big Creek 4 Relicensing and License Implementation, including Recreation, Rehabilitation, and Forest/Recreation Resiliency Projects NEPA Clearance – USFS Sierra National Forest
11	Yosemite National Park – Yosemite Valley Merced River Restoration
12	PG&E – Kennedy Meadows – Restoration and Permitting – USFS Stanislaus NF
13	PG&E – Buck's Creek Power Plant Relicensing, Poe Riparian Monitoring Plan, Rock Creek-Cresta Riparian Flow Development – USFS Plumas NF
14	Lassen Lodge Hydroelectric Project – EIR and Water Quality Certification for CEQA
15	Southern California Edison – Kaweah Hydroelectric Project Mitigated Negative Declaration – USFS Sequoia-Kings Canyon NF
16	SCE – Wildfire Management Plan – Vegetation Management for Wildfire Protection at generation facilities (USFS SNF, Inyo NF, Stanislaus NF, Sequoia-Kings Canyon NF)
17	PG&E – Phoenix Hydroelectric Relicensing Project – USFS Stanislaus NF
18	SCE – Rush Creek Relicensing – USFS Inyo NF
19	PG&E – Kerckhoff Hydroelectric Relicensing
20	John Muir Trail Realignment Project – Biological and Archaeological Surveys and Reporting – USFS SNF and Sequoia-Kings Canyon NF

Attachment B

## Wet Meadow Delineation and Archaeological Survey for Wilderness Restoration Projects

Sierra Nevada, CA

**Client:**  
John Muir Trail Wilderness Conservancy

**Start and Completion:**  
2021-current

**Contact:**  
Claire Freeman  
Manager of Grants & Field Programs  
2120 Avy Avenue | Menlo Park, CA 94025  
909.900.6782 | [claire@jmtwilderness.org](mailto:claire@jmtwilderness.org)

**Key Services:**  
> Biological Services  
> Wetland Delineation  
> Field Work in Remote Locations  
> Archaeological Services

In 2021, the John Muir Trail (JMT) Wilderness Conservancy (Conservancy) launched a landscape-level ecological survey to determine the most effective locations to support long-term restoration efforts along portions the JMT along in US Department of Agriculture – Forest Service, Sierra National Forest (SNF) and Sequoia and Kings Canyon National Parks (SEKI). Proposed 2022 work consists of archaeological surveys along the Pine Creek Canyon and McGee Pass trails on the Inyo National Forest (INF) in the Ansel Adams Wilderness. The objective of the Conservancy's restoration efforts in partnership with federal land managers is to make habitats more resilient and support the long-term ecosystem health along the JMT and popular hiking trails in wilderness areas. Cardno was hired to provide biological and archaeological resources support in several locations, specifically:



> **Wet Meadow Delineation and Reporting** – Cardno biologists conducted a field wetland delineation effort within the Sallie Keyes wet meadow complex proposed for trail restoration on the SNF. Biologists followed appropriate regulatory agency guidance (i.e., US Army Corps of Engineers, California State Water Resources Control Board, and California Department of Fish and Wildlife [CDFW]) for identification of wetlands and non-wetland waters of the US and State as well as potential CDFW jurisdiction. The delineation report was submitted to SNF and is currently under agency review.

> **Archaeological Resource Surveys and Reporting** – Cardno archaeologists surveyed the area of potential effects for proposed restoration projects in compliance with Section 106 of the National Historic Preservation Act. The two proposed restoration areas included Sallie Keyes wet meadow complex on the SNF and numerous sites in SEKI's Evolution Valley proposed for restoration or trail reroutes. The final survey findings were submitted to SEKI and SNF and are currently under agency review.

## Meeks Meadow Restoration Planning, Environmental Documentation, & Permitting

Meeks Bay, CA

**Client:**  
Washoe Tribe of Nevada & California

**Start and Completion:**  
2017-2020

**Contact:**  
Susan Jamerson  
Environmental Program Director  
919 US Hwy 395 N | Gardnerville, NV 89410  
775.315.6811  
[susan.jamerson@washoetribe.us](mailto:susan.jamerson@washoetribe.us)

**Key Services:**  
> Biological/Archaeological Services  
> CEQA/NEPA Documentation  
> TRPA Permits  
> Stakeholder Engagement & Agency Coordination  
> Climate Adaptation & Action Plan  
> Tribal Consultation & Coordination

In partnership with the US Forest Service and the Washoe Tribe and in collaboration with the TRPA and Lahontan Water Board, Cardno developed and finalized restoration plans for the 300-acre montane meadow sited along Lake Tahoe's west shore. Restoration plans include invasive conifer thinning and removal, prescribed fire applications, and culturally significant vegetation plantings. Cardno was responsible for project management and agency coordination, and facilitated public and Tribal scoping meetings and outreach. Field staff conducted baseline surveys and reporting for vegetation community mapping and special-status plant and wildlife species. Final deliverables include a Cultural Management Plan and a Cultural Monitoring Plan.



In 2018, Cardno coordinated with TRPA and Lahontan staff to negotiate a boundary line adjustment for portions of the project area that were erroneously mapped SEZ (stream environmental zone). This map correction allowed for finalization of restoration plans and the project proposal. Cardno prepared the IEC and EIP project application, and TRPA approved the project, issuing a FONSI in December 2018. With the Lahontan Water Board agreeing to serve as the CEQA lead agency, Cardno prepared the project-specific IS/ND, which was approved in March 2019, and concurrently enrolled the project in the 2014 Timber Waiver Program as a Category 6 project. With the US Forest Service currently supplementing their NEPA completed in 2015, the Meeks Meadow Restoration Project is "shovel ready" and funding sources are being identified.

Under an extended contract, Cardno continued to work with the Washoe Tribe. In 2020, Cardno compiled the administrative project record, designed targeted public scoping materials, developed restoration planting details and seed mixes, assisted the Tribe will developing and implementing a groundwater monitoring plan, and prepared a conceptual design for an interpretive trail/boardwalk.

## Environmental Clearance On-call Contract – Hydro-generation Program

*Mono, Inyo, and Fresno Counties, CA*

**Client:**

Southern California Edison (SCE)

**Start and Completion:**

2016-current

**Contact:**

Anne McAulay, Senior Manager,  
Environmental Services  
PO Box 800 | Rosemead, CA 91770  
626.607.7036  
Anne.Mcaulay@sce.com

**Key Services:**

- > Biological/Archaeological Services
- > NEPA Documentation/Permitting
- > Biological & Cultural Resource Analysis
- > Wetland Delineation & Permitting
- > Environmental Compliance Construction Support
- > Agency Coordination

Since 2016, Cardno, now Stantec has been the primary consultant providing environmental compliance support for Southern California Edison's (SCE's) hydro-generation program for non-routine maintenance activities at SCE facilities associated with the Eastern Hydro and Big Creek Hydroelectric Projects in Mono, Inyo, and Fresno Counties. Under this program, Cardno is regularly tasked with the following:



- > Preparing narrative project descriptions for USDA-FS 4(e) license condition packages for review and approval by the Inyo National Forest (INF) and Sierra National Forest (SNF),
- > Conducting biological reviews via desktop or in the field and preparing biological resource reports for Section 7 Endangered Species Act compliance,
- > Conducting wetland delineations and reporting, providing cultural support via desktop review or field effort and cultural reporting for Section 106 compliance,
- > Developing permitting strategies and permitting packages under Section 401 and 404 of the Clean Water Act as well as Lake or Streambed Alteration Agreements, and
- > Providing construction support (i.e., biological, cultural, and/or water quality monitoring, and best management practice [BMP] inspections).

Cardno has also supported hazardous tree removal-related projects in the Big Creek area both pre- and post-fire. In 2018, in consultation with SCE and SNF, Cardno prepared a decision memorandum for categorical exclusion for NEPA compliance for a hazardous tree removal project that included cultural and biological resource analysis via geographic information systems (GIS) of 29 treatment areas. Cardno resource specialists worked with SCE and SNF to develop appropriate project-specific resource design criteria by treatment area. Post-Creek fire in 2020, and under tight deadline due to the emergency and need to access SCE facilities safely, Cardno conducted a similar resource review and analysis and prepared a decision memo for CatEx for 22 treatment areas.

## Mammoth Pool Reservoir Recreation Rehabilitation Project

*Sierra National Forest, CA*

**Client:**

Southern California Edison (SCE)

**Start and Completion:**

2018-2020

**Contact:**

Jeff Irwin, Heritage Manager  
Sierra National Forest  
P.O. Box 800 | Rosemead, CA 91770  
559.855.5355 | jeffrey.irwin@usda.gov

**Key Services:**

- > Recreation Planning
- > Archaeological Surveys
- > Mitigation Planning
- > Tribal Consultation & Coordination

Cardno, now Stantec conducted cultural resource surveys and cultural resources assessment report and is currently assisting the Sierra National Forest (SNF) with tribal consultation and submission of results to the State Historic Preservation Office (SHPO) for proposed projects to rehabilitate, replace, and improve select developed recreation facilities (e.g., picnic areas and campgrounds) near SCE's hydroelectric facilities adjacent to Mammoth Pool Reservoir on the SNF. These projects are being completed as part of SCE's relicensing of its Big Creek Hydroelectric System projects pursuant to the Federal Energy Regulatory Commission's Alternative Licensing Process.



The relevant cultural resources tasks include the following:

- > Conducting archaeological survey of project Area of Potential Effect (one of which requires a boat to access the boat-in, roadless campground)
- > Updating existing site records
- > Recording and evaluating historic campgrounds for listing on the National Register of Historic Places
- > Developing protection measures and design features to minimize and avoid adverse effects on cultural resources
- > Assisting SCE and SNF with tribal consultation regarding archaeological resources and traditional cultural properties

## Walker River State Recreation Area Development Plan & Multi-use Recreational Trails Project

*Lyon County, NV*

<p><b>Client:</b> State of Nevada, Division of State Parks</p> <p><b>Start and Completion:</b> 2020-current</p>	<p><b>Contact:</b> Janice Keillor, Deputy Administrator 901 S Stewart St #5005 Carson City, NV 89701 775.684.2787   jkeillor@parks.nv.gov</p>	<p><b>Key Services:</b></p> <ul style="list-style-type: none"> <li>&gt; Biological &amp; Cultural Resource Surveys</li> <li>&gt; NEPA Process &amp; Documentation</li> <li>&gt; GIS and Data Management</li> <li>&gt; Special Status Species Surveys</li> <li>&gt; Stakeholder Facilitation</li> <li>&gt; Conceptual Planning</li> </ul>
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Cardno, now Stantec is leading the planning effort to develop the Rafter 7 Ranch Unit, an approximately 3,000-acre ranch south of Yerington, Nevada recently acquired by the Nevada Division of State Parks (NDSP). The property includes more than 11 miles of the East Fork of the Walker River. Cardno is working with NDSP to identify significant biological and cultural resources and develop conceptual site plans for recreation and resource protection. Project support to date has included surveys to map western yellow-billed cuckoo habitat and occurrences along the river corridor; surveys to map significant botanical and weed species; and surveys to assess the historic resource eligibility of Rafter 7 Ranch structures and lands. The Cardno team has also developed a NEPA Environmental Assessment (EA) for Phase I of the Rafter 7 Ranch Development Plan to provide environmental clearance for the installation of prefabricated cabins for over-night accommodations funded by a National Parks grant. The Cardno team is also currently supporting the Phase II master planning efforts. These efforts are assisting in the development of a detailed project description Nevada Department of Environmental Protection and Cardno will use to focus the second phase National Park Environmental Analysis process.



Cardno is also developing a NEPA EA for the Minister Road Right-of-Way and Multi-use single-track Recreational Trail Project on the 2,300-acre Pitchfork Ranch Unit of the newly created Walker River State Recreation Area. The Project involves analyzing the environmental consequences associated with the construction of a new road to provide safe year-round access to the unit. The project also includes a new multi-use dirt trail of approximately 3 miles along a previously undisturbed alignment.

Cardno's is directly coordinating with NDSP (project proponent), Nevada Division State Lands (landowner), and Bureau of Land Management (landowner of portions of proposed road and trail, NEPA Lead). Cardno is also responsible for the environmental site assessment (ESA-Phase I), biological and cultural surveys and reports, EA document scoping process, alternatives development, EA document and decision memo.

## Rush Creek Project Relicensing

*Mono County, CA*

<p><b>Client:</b> Southern California Edison</p> <p><b>Start and Completion:</b> 2020-ongoing</p>	<p><b>Contact:</b> Matthew Woodhall Relicensing Project Manager 1515 Walnut Grove Ave Rosemead, CA 91770 909-362-1764   matthew.woodhall@sce.com</p>	<p><b>Key Services:</b></p> <ul style="list-style-type: none"> <li>&gt; FERC Relicensing</li> <li>&gt; Stakeholder Collaboration</li> <li>&gt; Strategic Planning</li> <li>&gt; Study Plan Development</li> <li>&gt; Operations Modeling</li> </ul>
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As prime consultant, Cardno, now Stantec is supporting SCE's relicensing of the Project utilizing FERC's Integrated Licensing Process (ILP). Cardno managed initial stakeholder outreach efforts and development of the Notice of Intent (NOI) and Pre-Application Document (PAD) which was filed in December of 2021. As part of that process, Cardno distributed a Project information questionnaire to stakeholders to solicit existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests and study plans, and provide the basis for analyzing potential Project impacts.



In addition, Cardno developed a suite of draft technical study plans designed to collect data to characterize existing resource conditions, including water use and hydrology; aquatic habitat mapping and assessment; water temperature; water quality; fish population and barriers; riparian vegetation; cultural resources; recreation; geomorphology; and operations modeling. Cardno is currently conducting Technical Working Group meetings with participants to refine the draft TSPs in advance of their formal Proposed Study Plan filing as part of FERC's Study Plan Determination Process.

Throughout the relicensing process, Cardno will support SCE in collaborative efforts with resource agencies, including the Inyo National Forest, California Department of Fish and Wildlife, and State Water Board; Native American Tribes; non-governmental organizations; and members of the public.

## CALVTP EIR AND TRAINING AND IMPLEMENTATION SUPPORT

### California Board of Forestry and Fire Protection



In response to the state's wildfire crisis, the Board of Forestry and Fire Protection's California Statewide Vegetation Treatment Program (CalVTP) proposed a plan to lower the risk of catastrophic wildfires on nonfederal lands by reducing fire fuels through vegetation treatments on large portions of the State Responsibility Area. With the goal of increasing the pace and scale of vegetation treatment activities to a target of 250,000 acres per year, treatment actions include fuel breaks; fuel reduction through mechanical removal, controlled burns, and herbicide application; and ecosystem restoration to return overgrown areas to natural fire-

adapted conditions. Ascent worked closely with the Board, CAL FIRE, the California Natural Resources Agency, CDFW, CARB, and Governor's Office staff to prepare the CalVTP Program EIR. One of the objectives was to streamline later activities consistent with the program, including by "within-the-scope" findings according to State CEQA Guidelines Section 15168 to speed the approval and implementation of larger-scale treatments than are currently able to occur.

Following certification of the CalVTP Program EIR in December 2019, Ascent designed, prepared the curriculum for, and conducted a CalVTP training program. The primary objective of the training program is to educate participants on how to complete a PSA and how to use the CalVTP Program EIR as a source of environmental information and analysis. As part of the training curriculum, Ascent prepared a joint PSA and addendum to the CalVTP Program EIR (PSA/Addendum) for UC Berkeley's Grouse Ridge Vegetation Treatment Project and prepared a PSA for the Midpeninsula Regional Open Space District's Bear Creek Redwoods Open Space Preserve Vegetation Treatment Project. The target training audience includes representatives of any of the dozens of state and local agencies that could use the CalVTP Program EIR to streamline CEQA review of vegetation treatment projects.

## MAMMOTH MOUNTAIN BASE LAND EXCHANGE EIS, NEPA COMPLIANCE

### U.S. Forest Service, Inyo National Forest (SE Group)

The USDA Forest Service's Land Acquisition Program allows for the acquisition of land by the Forest Service through various types of exchanges, including land-for-land exchanges. Ascent assisted SE Group and the Forest Service in preparing environmental review documents in an effort to execute a land exchange between the Forest Service and Mammoth Main Lodge Redevelopment LLC, a closely related private entity to Mammoth Mountain Ski Area LLC, who are the holders of a Forest Service Special Use Permit for the Mammoth Mountain Ski Area. The land exchange involved the two previously Forest Service-owned land parcels at the base of the Mammoth Mountain Ski Area that are proposed for redevelopment under this proposal, and 12 formerly privately owned land parcels totaling approximately 1,317.5 acres throughout the Inyo, Plumas, and Stanislaus National Forests.

Ascent prepared a biological evaluation/biological assessment (BE/BA) and a wetlands and floodplain assessment pursuant to Code of Federal Regulations Part 1022, Compliance with Floodplain and Wetland Environmental Review Requirements under Executive Order 11988, Floodplain Management, and Executive Order 11990, Wetlands Protection. Ascent also conducted the environmental review for the EIS for physical resources associated with the proposed land transfer, including biological resources, climate change and air quality, geology and mineral resources, solid and hazardous waste, and hydrology.



#### LOCATION

Statewide

#### REFERENCE

Edith Hannigan  
Land Use Planning  
Program Manager  
916.862.0120  
edith.hannigan@b  
of.ca.gov



#### LOCATION

Mono, Inyo,  
Plumas, and  
Stanislaus  
Counties

#### REFERENCE

Janelle Walker  
Mountain Resort  
Program Manager  
Forest Service,  
Pacific Southwest  
Regional Office  
760.924.5523  
janelle.walker@us  
da.gov

# Attachment B

Ascent also assisted the Inyo National Forest with technical evaluations for environmental NEPA compliance related to additional projects within the MMSA Special Use Permit (SUP) area boundary. These projects include the Chair 16 replacement project, which involved replacement of the former Chair 16 and infrastructure with a high-speed quad chair lift, as well as snowmaking infrastructure expansion, and redevelopment of the Woolly's Tube Park. Ascent conducted biological resource surveys for these projects, including botanical and wildlife surveys, invasive plant surveys, and species-specific Sierra marten surveys.

## PRATHER-MEDUSA FOREST RESILIENCE PROJECT AND ENVIRONMENTAL ASSESSMENT

**National Fish and Wildlife Foundation/U.S. Forest Service, Stanislaus National Forest**

Ascent, under contract to the National Fish and Wildlife Foundation (NFWF), worked collaboratively with the Stanislaus National Forest to develop the Prather-Medusa Forest Resilience Project and prepare an Environmental Assessment (EA) consistent with NEPA. The project involves forest resilience treatments across 7,136 acres of National Forest lands. Ascent worked closely with Forest Service specialists to design forest resiliency treatments that were consistent with the Forest Plan and tailored to address management goals in specific emphasis areas including habitat for California spotted owl and northern goshawk, the wildland-urban interface, forest plantations, fuel breaks, and aspen and meadow restoration areas. To support NEPA compliance, the Ascent team conducted biological and cultural resource surveys, developed project design criteria, and prepared technical specialist reports including a biological assessment, biological evaluation, invasive plant risk assessment, hydrology and soils report, and cultural resources report. Ascent then prepared an EA consistent with NEPA and US Forest Service requirements. Key issues related to special-status species including species associated with old growth forest, Forest Plan consistency, temporary soil erosion and stream water quality, economic viability of timber sales, and effects on outdoor recreation activities.



### LOCATION

Stanislaus National Forest

### REFERENCE

Johnathan Birdsong  
Western Regional Director  
National Fish and Wildlife Foundation  
415.778.0999  
jonathan.birdsong@nfwf.org

## NORTH YUBA FOREST RESILIENCE PROJECT EIS

**South Yuba River Citizens League**



The North Yuba Landscape Resilience (NYLR) Project is a landscape-scale forest restoration project in the North Yuba River watershed within the Tahoe National Forest (TNF).

The Proposed Action was developed through a collaborative process by the North Yuba Forest Partnership (NYFP), a nine member agency including the Forest Service, the South Yuba River Citizens League (SYRCL), and other

stakeholders. The intent of the NYLR Project is to improve and restore forest health and resilience, reduce the risk of uncharacteristic wildfire, protect and secure water supplies, and protect communities from the effects of high-severity wildfire and climate change in the North Yuba River watershed. The planning area is approximately 275,000 acres, of which approximately 210,000 acres are National Forest System (NFS) lands. Because the Proposed Action includes activities that would not be compliant with the existing Forest Plan, Forest Plan amendments are also included to ensure adherence to the Forest Plan.

Ascent worked with the stakeholders to develop a staged decision-making approach. Staged decision-making means that proposed actions for the Landscape would be analyzed in one environmental analysis document (i.e., project EIS); however, subsequent review and separate decision documents would be issued for future sub-projects within the Project area prior to implementation of each sub-project.

### LOCATION

Sierra County, California

### REFERENCE

Laurie Perrot, Forest Environmental Coordinator  
Tahoe National Forest  
530.478.6244  
laurie.perrot@usda.gov

# Mariposa County Recreation and Resiliency Plan

Mariposa County, California

Within the past twenty years, every community in Mariposa County has been threatened by major wildland fires. This Plan insists that recreation planning must address these issues of wildfire and climate change and do more than solely address park needs. It equips leaders with multilayered resiliency planning and design tactics to address climate change. Clear goals and strategies enable planners to achieve the co-benefits of integrating resiliency adaptation measures into parks, trails, and open spaces. The Design Workshop team led the County through a master planning process and the resulting resilient recreation system can better withstand changing conditions, chronic stresses, and acute shocks while continuing to provide critical services. The Plan enhances the quality of recreation while increasing the ability of the community and natural systems to prepare, recover, adapt, and grow from disruptive experiences. To create the



planned recreation system, the team established a baseline analysis of the existing parks and recreation opportunities within the County and an assessment of the community's needs and trends impacting recreation. The proposed recommendations reflect Mariposa's unique population and situation as a recreation provider in a rural area and sets the direction for Mariposa County as both a resiliency leader and a great place to live and recreate.

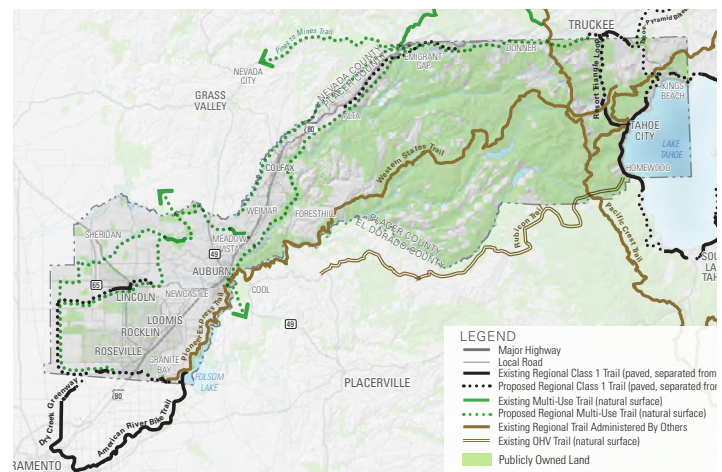
**Client** Mikey Goralnik, Community & Dev. Planner at Mariposa County, [mgoralnik@mariposacounty.org](mailto:mgoralnik@mariposacounty.org), 209.742.1222

**Services Provided** Park & Resiliency Planning, Public Outreach

# Placer County Parks and Trails Master Plan

Placer County, California

The Design Workshop team led Placer County through a master plan process to create the first county wide parks and trails master plan. Placer County is home to over 360,000 people who value the county's diverse and year-round recreation. The master plan identifies parks and trails priorities and answers how, when, and where those improvements should be made. The plan outlines the big ideas for parks and trails for the next 10 years. It also provides direction for the Board of Supervisors and staff to take action and directs a strategic course for funding new projects. The project process included: a county wide survey, analysis and recommendations, and benchmark reviews, outreach, and plan development with continued opportunity for public input in correlation with environmental documentation.



**Client** Andy Fisher, Parks Administrator, Placer County Public Works, [afisher@placer.ca.gov](mailto:afisher@placer.ca.gov), 530.889.6819

**Services Provided** Park Planning, Trails Planning, Public Facilitation & Outreach



# Big Sur Coast Sustainable Transportation Management Plan

Hwy 1 Carmel to Cambria, California

The Big Sur Coast Highway lies along a dramatic 100-mile stretch of Hwy 1 at the intersection of the Pacific Ocean and the California Central Coast. It has been a destination since it was built in 1937. Best known for its iconic vistas, people tour down Hwy 1 and stop at roadside pullouts for photo opportunities. User behavior is increasingly a source of conflict, exacerbating issues such as human waste, limited parking capacity in recreation areas and along roadsides, and traffic congestion. Recognizing the string of complex issues that affect Big Sur, Design Workshop worked with more than 30 stakeholder agencies and engaged community members to develop a transportation demand management plan that shifts how people access and experience the corridor. The resulting framework plan manages the impacts of tourism and transportation while preserving the rural character and resiliency of the fragile coastal environment. A suite of recommendations



were made across six areas: transit and shuttle services, traveler information, infrastructure enhancements, active transportation, data collection and analysis, and parking management and enforcement. Benefits include improved air and water quality, reduced energy consumption, reduced erosion, and the increase in plant diversity and coastal resiliency associated with managing visitor use. For recreation areas like this region, the outcome is also an improved corridor experience for residents and visitors.

**Client** John Olejnik, Senior Transportation Planner, Caltrans, 805.542.4751, john.olejnik@dot.ca.gov

**Services Provided** Design Guidelines, Corridor and Recreation, Planning, Landscape Architecture, Public Outreach

# State Route 89 Recreation Corridor Management Plan

El Dorado County, California

State Route 89, a two-lane mountain roadway, is the only access route to many of Lake Tahoe's popular recreation areas and serves an average of 1.8 million visitors annually. The corridor is one of the most visited and most popular within the Tahoe Region. The variety of natural and cultural resources abound in the corridor, making it the jewel of Lake Tahoe. A special place to be and an important place to protect so it is not loved to death.

Design Workshop facilitated a three agency steering committee and led a process to align the vision and a coordinated set of goals for 17 land managers and key stakeholders to work toward. The document sets the stage for why change is needed, summarizes recommended strategies to collaboratively manage the corridor, and includes a series of phased projects to achieve the vision



of shifting the way people arrive to their recreation destinations from being auto-dominated to more transit and multi-modal focused.

The plan identifies conceptual alternatives, vision, and principles for the West Shore Tahoe Trail. As a result of the plan, a feasibility study for completion of the West Shore Tahoe Trail was identified as a Phase 1 project.

**Client** Tahoe Regional Planning Agency, Michelle Glickert, TRPA, 775.589.5204 mglickert@trpa.org

**Services Provided** Capacity Analysis, Recreation Planning, Illustrations, GIS Mapping and Analysis, Public Facilitation, Conceptual Trail Planning

# Attachment B

## MCGAFFEY FOREST AND RIO GRANDE DEL RANCHO WATERSHED RESTORATION ENVIRONMENTAL ASSESSMENT



Taos County, New Mexico

Between 2018-2021, SE Group conducted fieldwork, prepared technical reports, and developed an Environmental Assessment (EA) in collaboration with the Carson National Forest (CNF), The Nature Conservancy, and the McGaffey Collaborative Group. The EA evaluated the effects of ecosystem restoration activities within a 29,500-acre area. Key objectives of the project included re-establishment of fire-adapted forests; protection of cultural resources from extreme fire behavior; protection of surface water sources including spring improvements; improvement of wildlife habitat in forests and associated riparian areas, including non-native plant removal and re-establishment of native vegetation in riparian areas; and promotion of watershed conditions that are resilient to future disturbance and a changing climate.



Due to the presence of southwestern willow flycatcher and designated critical habitat, as well as known presence of Mexican spotted owl, the project team coordinated closely with both the USFWS as well as the CNF Forest Plan revision team to develop appropriate project design features and develop necessary Forest Plan amendments to allow species management to align with the current best available science. The project also required the development of a programmatic agreement with the State Historic Preservation Office to identify and assess known resources as well as determine a process for identifying future additional survey and project design features.\*



Photo credits: [www.nps.gov/](http://www.nps.gov/) / [TaosNews](http://TaosNews)

## BOOTH CREEK FOREST HEALTH AND FUELS ENVIRONMENTAL ASSESSMENT

Eagle County, Colorado

SE Group is currently developing an EA on behalf of the White River National Forest (WRNF) and Town of Vail to analyze the effects of ecosystem restoration activities within a 3,605-acre area on National Forest System (NFS) lands. These NFS lands include lands within the Eagles Nest Wilderness, lands proposed for wilderness under the Colorado Outdoor Recreation and Economy Act, and roadless areas.



In addition to hazardous fuels reduction projects, proposed activities include habitat enhancement for bighorn sheep and elk and consideration of backcountry and dispersed recreation. Early and frequent collaboration with wilderness interest groups and Town of Vail government and residents is necessary to ensure the project can move efficiently through the NEPA process.



Photo credits: [www.allvail.com/](http://www.allvail.com/) / [www.hikingproject.com](http://www.hikingproject.com) Luaren Gifford

## TOGETHER we can do great things

### Community

When we say community, we don't just mean the neighborhoods that people call home. We mean everyone and everything with a stake in the work that we do—from our Stantec and industry colleagues to the clients we collaborate with and the people and places we impact.

Whether creating, sustaining, or revitalizing a community, we help diverse cultures and perspectives work together toward shared successes.

Although our work helps to create physical communities, our ultimate goal is to create something far more meaningful—a sense of community.

### Creativity

For us, creativity is driven by purpose. Knowing that transformation is truly possible inspires us to approach every situation with a fresh perspective.

Our inventive and collaborative approach to problem-solving helps bring big ideas to life through creative solutions.

Whether our contribution is a design that strikes the perfect balance between function and aesthetics, a feat of engineering that redefines what's possible, or a project management approach that delivers results, we strive for outcomes that transcend the challenges they solve and shape the communities we serve for the better.

### Client Relationships

We're better together. This belief shapes how we collaborate with our clients, our partners, and our communities.

We listen so we can deeply understand our clients' needs, communicate with purpose so we maintain alignment, and remain open and flexible so we never miss an opportunity to strengthen a project and positively transform a community.



## STAFF REPORT

**To:** ESCOG Joint Powers Authority

**From:** Elaine Kabala, ESCOG Staff

**Subject:** Amendment Number 3 to the Agreement Between the Eastern Sierra Council of Governments and Eastern Sierra Planning, LLC for the Provision of Administrative Services

**Meeting date:** April 8, 2022

**Prepared on:** March 29, 2022

**Attachments:** A) Amendment Number 3 to the Agreement Between the Eastern Sierra Council of Governments and Eastern Sierra Planning for the Provision of Administrative Services

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### **BACKGROUND/HISTORY:**

At their October meeting, the ESCOG approved a contract for between the ESCOG and Elaine Kabala for administrative services from September 15, 2021 through March 15, 2021, unless sooner terminated. Amendment No. 2 also amended the "Contractor" to be Eastern Sierra Planning, LLC instead of "Elaine Kabala," for the provision of administrative services.

The proposed contact amendment (Attachment A) extends the contract through October 15, 2021, unless sooner terminated. The amendment proposes an increase in compensation from \$25,000 per the original contract to \$50,000 consistent with the adopted 2021-22 budget.

No other changes are proposed to the original agreement.

### **BUDGET IMPACTS:**

The agreement extends the contact to October 15, 2022. The amendment proposes an increase in compensation from \$25,000 per the original contract to \$50,000 consistent with the adopted 2021-22 budget.

### **LEGAL REVIEW:**

ESCOG Counsel Grace Chuchla has reviewed this item and found that it complies with the law.

**RECOMMENDATION:**

Staff recommends the ESCOG Board approve Amendment Number 3 to the Agreement Between the Eastern Sierra Council of Governments and Eastern Sierra Planning for the Provision of Administrative Services.

Attachment A

**AMENDMENT NUMBER 3 TO THE  
AGREEMENT BETWEEN THE EASTERN SIERRA COUNCIL OF GOVERNMENTS AND  
ELAINE KABALA FOR THE PROVISION OF ADMINISTRATIVE SERVICES**

WHEREAS, the Eastern Sierra Council of Governments (hereinafter referred to as "ESCOG") and Eastern Sierra Planning, LLC (hereinafter referred to as "Contractor"), have entered into an Agreement for the Provision of Administrative Services, dated October 16, 2020, for the term from October 15, 2020 to March 15, 2021

WHEREAS, ESCOG and Contractor desire and consent to amend such Agreement as set forth below;

WHEREAS, such Agreement provides that it may be modified, amended, changed, added to, or subtracted from, by the mutual consent of the parties thereto, if such amendment or change is in written form, and executed with the same formalities as such Agreement, and attached to the original Agreement to maintain continuity.

ESCOG and Contractor hereby amend such Agreement as follows:

- 1. Paragraph 2 (Term) shall be amended to read as follows:

The term of this Agreement shall be from March 15, 2022 to October 15, 2022 unless sooner terminated as provided below.

- 2. Section 3 Consideration (D) Limit upon amount payable under Agreement shall be amended to read as follows:

The total sum of all payments made by ESCOG to Contractor for services and work performed under this Agreement shall not exceed Fifty Thousand Dollars (\$50,000) (hereinafter referred to as "contract limit"). ESCOG expressly reserves the right to deny any payment or reimbursement requested by Contractor for services or work performed which is in excess of the contract limit.

All the other terms and conditions of the Agreement are unchanged and remain the same.

**ESCOG**

**CONTRACTOR**

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Print or Type Name

\_\_\_\_\_  
Print or Type Name

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

APPROVED AS TO FORM AND LEGALITY:

\_\_\_\_\_  
ESCOG Counsel

APPROVED AS TO ACCOUNTING FORM:

